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landscape | environment | heritage



Greater Cambridge Shared Planning
North East Cambridge
Heritage Impact Assessment

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Heritage Impact Assessment

Approved

A handwritten signature in black ink, appearing to read 'A. Croft', written over a horizontal line.

Andrew Croft

Position Director

Date 28th September 2021

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EXECUTIVE SUMMARY

Introduction and Context

This Heritage Impact Assessment (HIA) has been commissioned by the Greater Cambridge Shared Planning Service to inform the development of a Townscape Strategy for the North East Cambridge (NEC) Area Action Plan (AAP).

The HIA is part of a wider suite of documents guiding development within the NEC including a Strategic Townscape Analysis which analyses the area's existing form, context, structure, use, building heights amongst other elements and a Townscape Strategy which provides a Spatial Framework guiding future development.

Scope of HIA

The role of this HIA is not to assess development proposals on the NEC, but rather assess the potential impact of future (as yet unspecified) development that would lie within the parameters established by the Townscape Strategy. The Townscape Strategy itself is informed by the heritage sensitivities identified in the baseline of this HIA with this document providing a summary of heritage sensitivities which required consideration as part of the Townscape Strategy development. The HIA goes on to describe the key elements which make up the Spatial Framework contained within the Strategy to inform the assessment stage.

This HIA identifies known and potential heritage assets which may be affected by the future development of the NEC Site, the parameters of which are set out within the Townscape Strategy. A range of sources were reviewed in order to build up a picture of the past activity on the NEC Site and within a study area of up to 6km or beyond in some specific instances. Historic map analysis and documentary review alongside a review of the Cambridgeshire Historic Environment Record (HER) data and associated archaeological reports have enabled an understanding of the historic development of the Site and its likely archaeological potential.

Designated and non-designated heritage assets which could be affected by the future potential development have been identified and described, their current setting or character

is also described and how this relates to their significance. Finally, the contribution of the NEC Site in its current form to this setting or character of these heritage assets is noted. This has enabled an assessment to be undertaken on the changes to the significance of each heritage asset as a result of the future development of the NEC Site, as currently set out in the Spatial Framework within the NEC Townscape Strategy and illustrated in Figure 8.1 of the Strategy. The subsequent part of this report addresses the impact assessment using tools including use of simplified ZTVs, VuCity modelling, photomontages or wire frames, Google Earth and aerial imagery, alongside professional judgement to hone likely impacts.

Findings

There are no designated heritage assets on the NEC Site. There are three non-designated heritage assets in the site: a WWII pillbox, a pair of semi-detached houses and The Old Cottage on Cowley Road. This HIA also identifies designated heritage assets in the wider study area which may be affected by future development, including Conservation Areas in proximity to the NEC and the listed buildings contained therein including Fen Ditton, Baits Bite Lock, Horningsea and Stourbridge and Riverside Conservation Areas; the Registered Parks and Gardens of Madingley Hall, American Military Cemetery and Anglesey Abbey; and the Scheduled and Listed Cambridge Castle Mound. In addition, the listed St George's Church at Chesterton and the locally listed Golden Hind Pub have also been identified as assets that could be affected.

Physical impacts of future development could involve the loss of The Old Cottage and a pair of semi-detached houses, although these are considered to be of very limited heritage value. Other physical impacts on heritage assets on the NEC Site may include removal of archaeological remains surviving within the Site, the extent and survival of which may require further assessment or fieldwork.

Assuming that future development is delivered within the parameters established by the Townscape Strategy, no significant changes to the setting of and significance of key heritage assets in the vicinity of the NEC area are predicted by the HIA as a result of future development. There will be minor changes to the views from three Conservation Areas – Stourbridge and Riverside, Fen Ditton and Baits Bite Lock. A limited number of longer

distance views from within these Conservation Areas will be slightly altered, potentially intensifying views of the existing development. These changes will not result in significant or notable harm, as long as a sensitive application of materials and palette, as well as suitable heights are managed, in accordance with the Strategy.

In terms of the change to the setting of Cambridge, future development delivered in line with the parameters established by the Townscape Strategy are unlikely to result in significant or notable harm to the setting of Cambridge as long as maximum and typical heights are managed and appropriate materials are used.

The report provides some guidance on requirements for further assessment once more detailed designs come forward as part of the planning application process and tools which can aid analysis. The report also identifies some areas where additional planting or screening could be introduced to minimise or soften visibility of the proposals.

1.0 INTRODUCTION AND SCOPE

1.1 Introduction

- 1.1.1 This Heritage Impact Assessment (HIA) has been prepared for North East Cambridge (Shown on Figure 1 in Appendix A) which is a 182-hectare area to the north east of Cambridge city. It currently houses Cambridge Science Park and Cambridge Regional College to the west and an area with industrial and office use, plus Waste Water Treatment Plant to the east. Further to the east is the Cambridge North Station and associated infrastructure.
- 1.1.2 A number of associated documents have been produced to assist in the development of this HIA, and where the HIA has been used to inform their content. These documents include an Area Action Plan for the NEC which is in draft format, a North East Cambridge Townscape Assessment, a North East Cambridge Townscape Strategy and a Strategic Heritage Impact Assessment for Cambridge. A full Bibliography of sources is included in Section 11.
- 1.1.3 The Area Action Plan¹ (AAP) has been drafted for the NEC Site by the Greater Cambridge Shared Planning Service that includes the Cambridge City Council and South Cambridgeshire District Council Planning Authorities. This has been consulted upon but is yet to be adopted. The HIA for the North East Cambridge Site (NEC Site) is being prepared to assist with preparation of the AAP.
- 1.1.4 A Townscape Assessment² has also been prepared for NEC which analyses the area's existing form, context, structure, use, building heights amongst other elements. A Townscape Strategy³ has been produced which builds on the understanding of the existing nature of NEC and provides a framework to ensure that the development of individual sites within NEC is coordinated to create holistic, connected and high-quality places. The Strategy considers the fundamental

¹ <https://www.greatercambridgeplanning.org/emerging-plans-and-guidance/north-east-cambridge-area-action-plan/>

² Urban Initiatives, North East Cambridge Townscape Assessment, June 2021

³ Urban Initiatives, North East Cambridge Townscape Strategy, June 2021

spatial elements of NEC such as and proposes advice on streets, land uses, building heights, urban blocks, public realm, character, materiality, use of colour and open spaces. The baseline information outlined in this HIA has been used to inform the development of the Townscape Strategy. Iteratively, the framework set out in the Townscape Strategy forms the basis of the 'proposals' which have been assessed within this HIA.

1.1.5 This HIA used the Strategic Heritage Impact Assessment: Baseline⁴ as a source of evidence. This Strategic Heritage Impact Assessment describes the setting of Cambridge. This HIA goes further than the Strategic HIA and considers more specifically how, should development be brought forward in line with the Townscape Strategy, this will affect those key aspects of that setting and character of Cambridge, but also any impacts on other heritage assets in the local area.

1.1.6 Whilst the Townscape Strategy provides a framework for development proposals coming forward, it is not of sufficient detail to enable a detailed heritage impact assessment suitable to support a planning application. Once individual more detailed development proposals come forward within the NEC Site, these will require planning permission and need to undertake more detailed assessments, including detailed heritage impact assessment to support applications.

1.2 Methodology and Sources of Information

1.2.1 This assessment has been undertaken in line with the Strategic Heritage Impact Assessment: Assessment Methodology for Site Specific Allocations⁵. This HIA for the NEC Site report covers a description of the baseline context and outlines an impact assessment based on the Spatial Framework set out within the NEC Townscape Strategy⁶. The report also includes an archaeological desk-based assessment. Further assessment work is likely to be required should the overarching framework

⁴ March 2021, Greater Cambridge Shared Planning, 'Strategic Heritage Impact Assessment Baseline' (CBA)

⁵ March 2021, Greater Cambridge Shared Planning, 'Strategic Heritage Impact Assessment: Assessment Methodology' (CBA)

⁶ September 2021, Urban Initiatives, North East Cambridge Townscape Strategy

set out in the Townscape Strategy be refined or amended, or as part of specific planning applications.

1.2.2 Planning policy and best practice guidance has also been used to inform the assessment which includes:

- NPPF⁷
- Historic England's Good Practice Advice Note 1: The Historic Environment in Local Plans⁸
- Historic England's Good Practice Advice Note 3: The Setting of Heritage Assets⁹
- Historic England Advice Note 3: The Historic Environment and Site Allocations in Local Plans¹⁰
- Historic England Advice Note 4: Tall Buildings¹¹
- Historic England Advice Note 12: Statements of Heritage Significance: Analysing Significance in Heritage Assets¹²

1.2.3 Sources of information which have been used to inform this HIA include:

- Review of secondary sources and past planning studies
- Historic and modern map analysis
- Primary and secondary sources on the history and development of Cambridge
- Review of historic paintings and prints
- Site visits to City and wider environs including the NEC Site
- Review of Local Plans
- Review of available heritage data from the National Heritage List and Local Plan
- Review of Cambridgeshire's Historic Environment Record (HER) for the Site plus a study area of 250m
- Relevant archaeological fieldwork reports identified from the HER
- Review of Historic Environment Character Area descriptions

⁷ <https://www.gov.uk/government/publications/national-planning-policy-framework-2>

⁸ <https://historicengland.org.uk/images-books/publications/gpa1-historic-environment-local-plans/>

⁹ <https://historicengland.org.uk/images-books/publications/gpa3-setting-of-heritage-assets/>

¹⁰ <https://historicengland.org.uk/images-books/publications/historic-environment-and-site-allocations-in-local-plans/>

¹¹ <https://historicengland.org.uk/images-books/publications/tall-buildings-advice-note-4/>

¹² <https://historicengland.org.uk/images-books/publications/statements-heritage-significance-advice-note-12/>

- Review of draft LCA for the area¹³
- Review and input into the NEC Townscape Assessment for the NEC¹⁴
- Review of the NEC Townscape Strategy¹⁵
- Review of the VuCity model
- Review of the Strategic Heritage Impact Assessment: Baseline¹⁶

1.2.4 A full list of guidance documents and sources are set out in Section 11 of this report.

1.3 Use of VuCity

1.3.1 VuCity is an interactive 3D digital modelling platform which has been created for Greater Cambridge Shared Planning Service. It is used as a design and masterplanning tool which includes the ability to view proposed developments from all angles and take screenshots to assist in assessing scale, massing, footprint, views and viewpoints. VuCity reflects the local terrain as part of its modelling. All of the modelling sample views contained in Appendix C were taken from ground level publicly accessible locations. Elevated vantage points were also considered and tested, such as from Castle Mound but again they reflect the local terrain. The exception to this was the view assessed from Great St Mary's Church, which was in direct response to comments from Historic England regarding the elevated views and potential for a visual relationship between Cambridge and Ely Cathedral.

¹³ September 2020, Greater Cambridge Shared Planning 'Landscape Character Assessment' (CBA)

¹⁴ Urban Initiatives, North East Cambridge Townscape Assessment, June 2021

¹⁵ Urban Initiatives, North East Cambridge Townscape Strategy, June 2021

¹⁶ May 2021, Greater Cambridge Shared Planning 'Strategic Heritage Impact Assessment: Baseline' (CBA)

2.0 HISTORY AND EVOLUTION OF SITE

2.1 Introduction

2.1.1 A range of sources were reviewed in order to build up a picture of the past activity on the NEC Site and within a study area of up to 6km or beyond in some specific instances. Historic map analysis and documentary review alongside a review of the Cambridgeshire Historic Environment Record (HER) data and associated archaeological reports have enabled an understanding of the historic development of the Site and its likely archaeological potential. The HER data is shown on Figure 1 in Appendix A, with an associated table of these records in Appendix B. Further supporting figures are included in Appendix A and Appendix C.

2.2 Geology, Topography and Surrounding Landscape

2.2.1 The Site lies on Gault Formation Mudstone with the eastern part of the NEC Site overlain with sand and gravels¹⁷. The NEC Site ranges from approximately 8 – 17m AOD across the Site, with much of the area within the Site having been landscaped or developed in the past.

The NEC Site sits within the Cambridge Urban Area within the Greater Cambridge Landscape Character Assessment (February 2021), but it is adjacent to the Cottenham Fen Edge Claylands LCA which is found to the north of the A14 and the Cam River Valley, Cambridge LCA to the east close to Fen Ditton. Fen Edge Claylands are characterised by low-lying, rolling landscapes with extensive vistas and large skies, gradually rising landform, south from the edge of the Fens, large-scale, open field systems defined by a hierarchy of drains, ditches and lodes. The 'Cam River Valley' is characterised by flat, low-lying, broad valleys, intimate, small-scale riverine landscapes, shallow river valleys with a mosaic of grazing meadow and wet woodlands with lines of willows along the rivers.¹⁸

¹⁷ <http://mapapps.bgs.ac.uk/geologyofbritain/home.html>

¹⁸ September 2020, Greater Cambridge Shared Planning 'Landscape Character Assessment', (CBA)

2.3 Prehistoric Period

- 2.3.1 Within the NEC Site itself is evidence from the prehistoric period. Evidence has included ephemeral finds including a small quantity of Late Bronze Age to Early Iron Age pottery (MCB17525) within Cambridge Science Park, prehistoric pottery found on Milton Road (08326), Bronze Age Beaker fragments (05532) and stone axes (05219). In addition to the finds, cropmarks of a Bronze Age ring ditch have been identified on aerial photos (HER 08326), which is believed to have been subsequently ploughed out.
- 2.3.2 In the wider area, large scale archaeological excavations to the north at Milton Landfill identified Mesolithic / Early Neolithic flint blades, and more historic gravel pits to the south have uncovered further evidence for prehistoric finds, and occasional activity such as Bronze Age field systems and possible farming settlement¹⁹.
- 2.3.3 Iron Age activity was again recorded during excavations at Milton Landfill (HER 11669A) outside of the NEC Site, where an Early Iron Age scattered farming settlement was found. Activity continued through to the Late Iron Age and consisted of settlement features and field system. Prehistoric activity, potentially from the Iron Age has also been identified during excavations at Arbury (05414A).
- 2.3.4 Whilst no evidence of early prehistoric permanent settlement has been identified, it is clear from ephemeral finds that there is evidence for a level of activity in and around the Cam Valley near to the NEC Site. The evidence for activity very much seems focussed on the gravel pits and landfill sites closer to the River Cam, however there is some potential on the eastern edge of the NEC Site given its proximity to the River and location closer to the gravel terraces.

¹⁹ Oxford Archaeology East. *270 Science Park Milton: Report 1830*. September 2015,

2.4 Roman

- 2.4.1 The NEC Site lies c. 500m from the line of a Roman Road meeting up with Akeman Street to the north of the A14, with Cambridge itself a military centre and subsequent market town²⁰.
- 2.4.2 On the immediate boundary to the western edge of the Site is the known Roman Camp and settlement of Arbury. Discovered in the 1950s and excavated further in the 1960s and 1970s, it revealed a Romano-British villa (05411), well, inhumation (burials) and pottery (05413). Further evaluations in the area along the line of the guided busway identified further pits, ditches and a quarry of Roman date (MCB19359) and sporadic evidence in the gravel pits at Milton.
- 2.4.3 On the NEC Site itself, prior to the development of the Cambridge Regional College at the western edge of the NEC Site, an evaluation was undertaken to determine whether the known Roman site and camp at Arbury extended into this area. This identified a single inhumation alongside pottery vessels were identified, likely to be in a ditch alongside the Roman road. No evidence of settlement activity was found (MCB 15697).

2.5 Anglo-Saxon and Medieval Periods

There is very little evidence of Anglo-Saxon activity within the NEC Site, or its immediate surrounds. Excavations at King's Hedges to the southwest of the NEC Site, within 250m of the NEC Site, a feature of potential Saxon date was identified possibly indicating smithing evidence (05421b).

- 2.5.1 Milton village itself is potentially of Anglo-Saxon origin, which was first recorded in AD975 as *Middletune* meaning 'middle farm'²¹. This is supported by Anglo-Saxon inhumations uncovered in the 1920s in Milton and finds of this date in the gravel pits of Chesterton (05540).

²⁰ Cambridge County Council. *Chesterton Park: An Archaeological Desktop Study. Report 138. 1997*

²¹ <https://epns.nottingham.ac.uk/search/p/%28placeName%3A%2A%2Amilton%2A%29?county%5B0%5D=Cambridgeshire>

2.5.2 There is limited evidence for medieval activity on the NEC Site with the exception of the occasional ditch or possible evidence of ridge and furrow identified during evaluations (MCB20484, MCB20105, MCB24204). There is a historical reference to the site of a cross on a map shown on the enclosure map, adjacent to the Milton Road now the location of the Waste Water Treatment Plant (05229). Overall, this indicates the area was subject to very little activity other than possible farming during this period, with the majority of activity during this period centred on the established and growing village centres including Fen Ditton to the east.

2.6 Post Medieval Period (1540s – 1890)

2.6.1 In terms of transport, the Milton Road formed part of the Cambridge-Ely turnpike created 1763-1874²², the now dismantled Cambridge to St Ives branch railway line (now part of the Cambridgeshire Guided Bus Network) (MCB19611) opened in 1847 which forms the southern boundary to the NEC Site and the Great Eastern Railway (MCB21582) finished in 1845, which forms the extant railway line to the eastern boundary of the NEC Site.

2.6.2 It is likely that the site was subject to continued agricultural activity during the post medieval period with the land being owned by Trinity College since its foundations in 1546 as shown on this drawing of Chesterton 1840-1980²³ (see Figure 2, Appendix A).

2.6.3 The NEC Site, part of the outer lying area of Chesterton parish, is indicated as being part of large open fields on the Inclosure Map of 1840. The area appears to have remained as farmland in the historic OS maps, with a now demolished farmstead 'Rectory Farm' seen (MCB20062) to the west of the NEC Site. A series of public drains cut through the Site and surrounding area and can be seen on the first edition OS map of 1887 as an attempt at improving conditions on the fields.

²² <https://www.british-history.ac.uk/vch/cambs/vol9/pp5-13>

²³ Ibid.

2.7 Modern (c.1900 onwards)

- 2.7.1 In 1895 Cambridge Corporation commenced work on the Sewage Farm, later known as the Waste Water Treatment Plant. It was divided into large rectangular sludge bed plots and embankments on each side. The extent is shown on the 2nd edition of 1903/4 on the eastern part of the NEC Site with large sludge beds immediately to the west of the Great Eastern Railway (see Figure 3 in Appendix A). In addition to the sewage beds themselves, a building later marked 'The Old Cottage' appears, along with a pair of semi-detached houses along Cowley Road. These are assumed to be workers houses. By the 1927 OS Map and subsequent 1936 mapping, the Sewage Farm had enlarged further and Rectory Farm (MCB22615) was renamed Trinity Farm (See Figure 4 in Appendix A).
- 2.7.2 An aerial photo images from 1945 shows the Site in use during World War II where it was used to prepare and store tanks and vehicles in preparation for the D-Day landings (See Figure 5 in Appendix A).
- 2.7.3 The OS in 1959 continues to show some development around Trinity Farm arising from the vehicle and tank depot associated with World War II (MCB17527) following requisition by the US Army²⁴ along with an associated pillbox (MCB16399). The railway sidings (MCB19625) extant since the 19th century have been enlarged and now used as a mineral depot just to the south of the army depot. Gravel beds are also shown on the area immediately to the north of the Sewage Farm.
- 2.7.4 Over the next 20 years, the extent of the Waste Water Treatment Plant contracted and parts of the original sludge beds were returned to agriculture and part of the southern area of the farm, used as an agricultural machinery market. The houses

²⁴ Oxford Archaeology East. *270 Science Park Milton: Report 1830*. September 2015

associated with the Sewage Farm continue to survive, with The Old Cottage being subject to a number of extensions and still survives now.

2.7.5 From the 1970s, mapping shows the establishment of the Science Park by Trinity College following planning permission in 1971, seen just to the north of the former railway line to the west of Milton Road. This included clearing and landscaping the area and turning the gravel pit into a lake²⁵. Crucially in this period, the A45 (to later become the A14) was under construction, forming the northern boundary of the NEC Site, with a new slip road formed to the south joining the Milton Road. The original Milton Road becomes a side road adjacent to the Sewage Farm. Large areas of railway sidings and mineral depot have expanded during the 1950s -70s.

2.7.6 The Science Park is extended further to the north by the 1990s (see Figure 6 in Appendix A) as well as the formation of St John's Innovation Park on the eastern side of Milton Road. Railway sidings have also extended at the junction between the former Cambridge-Ely railway line and the Great Eastern Railway to the south eastern corner of the NEC Site. The Cambridge Regional College was established on the Site in the early 1990s and subsequently expanded over the years with new buildings. The guided busway created on the former line of the Cambridge-Ely railway was opened in 2011. The creation of the Cambridge North Railway Station at the location of the mineral depot and sidings in the south eastern corner of the NEC Site was approved in 2014 and construction by 2017 with station building and associated public realm and car parking.

2.8 Current Description of the NEC Site

2.8.1 The NEC Site is located on the edge of Cambridge, two miles out of the city centre to the northeast. Its area is larger than the designated City Centre area (see NEC Townscape Assessment). The predominant land use within the NEC Site is office and industrial, with widely spaced, large footprint office and industrial buildings

²⁵ <https://www.cambridgesciencepark.co.uk/about-park/past/>

surrounded by car parks, industrial areas and vacant land. The hinterland is suburban housing and estates.

- 2.8.2 The NEC Townscape Assessment shows the open spaces and landscape features within the NEC Site which include a large number of man-made landscaped areas.
- 2.8.3 The NEC Site sits at a low elevation ranging between 8-9m AOD in the east, close to the railway line, and 16-17m AOD in the centre of Cambridge Science Park to the west of Milton Road. The area is not particularly prominent in the landscape. The land rises to the southwest and southeast. Despite its low elevation, the NEC Site is not prone to flooding, being outside of the Flood Zone areas identified by the Environment Agency. The Townscape Assessment includes a number of photographs of the NEC Site in its current form.
- 2.8.4 The strategic regional road network surrounds the city of Cambridge to the west and north and is a strong presence for the NEC Site. The A14 forms the northern boundary of the NEC Site. Milton Road is a strategic corridor for regional and local traffic through the centre of the Site via a slip road off the A14. The NEC Site is enclosed by road infrastructure to the north and west, a guided busway to the south and railway to the east. There are few entrances into the area.
- 2.8.5 The NEC Site is split into two distinct sub-areas by Milton Road which runs broadly through the centre – Cambridge Science Park, to the west of Milton Road and the Industrial / Waste Water Treatment Plant / Office Park which is sandwiched between Milton Road and the mainline railway.
- 2.8.6 Within the Cambridge Science Park area to the west of Milton Road are the following sub-areas: Cambridge Science Park, Cambridge Regional College and Car Dealerships along Milton Road.
- 2.8.7 Within the Industrial / Waste Water Treatment Plant / Office Park to the east of Milton Road are the following sub-areas: St John's Innovation Park, Orwell House /

Merlin Place, Cambridge Business Park, Waste Water Treatment Plant, Cambridge Commercial Park / Cowley Road Industrial Estate, Chesterton Railhead Aggregate Site, Cambridge North Station, Trinity Hall Farm Industrial Estate / Nuffield Road Industrial Estate.

- 2.8.8 The NEC Townscape Assessment provides further description on the character, density, landmarks and heights of development within these areas.

2.9 Extent of Ground Disturbance and Archaeological Potential

- 2.9.1 There has been an extensive ground disturbance on the Site due to historic activity from the 19th century onwards, together with extensive redevelopment from the 1970s onwards. To the east of Milton Road, the Waste Water Treatment Plant with associated large scale sludge pits, each landscaped at the edges to form embankments, alongside tanks are likely to have largely removed or heavily disturbed horizons containing archaeological material. Figure 7 in Appendix A has outlined the likely extent of ground disturbance across the NEC Site through analysis of historic mapping, aerial photos and review of documentation.
- 2.9.2 There has also been considerable change to the west of Milton Road. The creation of the Science Park with some large footprint buildings, lake areas and landscaping to create surrounding parks as well as associated infrastructure such as car parking, pavements, roads is likely to have disturbed or removed archaeological remains which may have survived in these areas.
- 2.9.3 In terms of infrastructure, the ground on the Site will also have been affected by the construction of railways including the associated pipework for the treatment plant may well have also affected the ground on the site. In addition, traversing through the centre of the NEC Site is the slip road off the A14 which will also have removed or buried surviving remains. To the southeast of the Waste Water Treatment Plant, a large area was used for railway sidings. Again, this will have heavily disturbed the archaeological horizons given the likely levelling and construction needed in this

location to form the sidings and then Cambridge North Station. Finally, there are a number of public drains which cut through the Site.

- 2.9.4 In summary, all of the Site appears to have been subject to ground disturbance to some extent. In some areas this is thought to be more superficial in nature, due to for example, the creation of car parks, paths or construction of light industrial units with minimal foundations. This may have removed the upper archaeological horizons but left intact more buried features such as cuts and fills. Alternatively, there are large sections of the Site where it is likely that the ground will have been subject to extensive ground disturbance such that any potential archaeological remains will have been removed or very heavily disturbed. Areas include the Waste Water Treatment Plant, construction of A14 carriageway and Milton Road slip road, former and current railways, footprints of large buildings with extensive foundations and creation of parks or lakes as part of landscaping works. Archaeological remains could survive between the railway sidings to the south east of the Site, however these are likely to be very fragmentary in nature given the past activity in the later 20th century.
- 2.9.5 Whilst there is a level of archaeological potential particularly for isolated finds or minor activity associated with the prehistoric period and Roman period, it appears as though the area for the most part at least since the Roman period onwards was an unsettled area with the land used to support agricultural activity. Exceptions to this could be in the area to the very west and southwest of the Site, where there is less evidence of ground disturbance combined with its proximity to Arbury Camp and the former line of Akeman Street. In addition, further work may be required to assess the potential for surviving remains to the southwest of the Waste Water Treatment Plant and within the railway sidings as remains could survive beneath deposited material, in an area of archaeological interest given its proximity to the Cam Valley and potential for prehistoric activity and finds on the gravels in this area.

3.0 CONTRIBUTION OF CURRENT NEC SITE TO SETTING OF DESIGNATED AND NON-DESIGNATED HERITAGE ASSETS

3.1 Introduction

3.1.1 The following section outlines the relevant heritage assets within the NEC Site and wider area which have the potential to be affected by proposals for the NEC Site as outlined in the Townscape Strategy²⁶, specifically the Spatial Framework and Illustrative Masterplan. Designated and non-designated heritage assets which could be affected by the proposals have been identified and described, their current setting or character is also described and how this relates to their significance. Finally, the contribution of the NEC Site, in its current form, to this setting or character of these heritage assets is noted. Considering the NEC Site's current contribution to the setting and significance of heritage assets, alongside consideration of likely level of development including high level information on massing, form and height has enabled a decision to be taken on whether an asset requires assessment, which is then outlined in Sections 7 - 9 where relevant.

3.1.2 The subsequent part of this report addresses the impact assessment (Sections 7 - 9) using tools including use of simplified ZTVs, VuCity modelling²⁷, photomontages or wire frames, Google Earth and aerial imagery, alongside professional judgement to hone likely impacts. Further details will be required at more detailed design phases to refine the assessments, likely during planning applications.

3.2 Within the NEC Site itself

3.2.1 There are no designated heritage assets on the NEC Site itself.

²⁶ Urban Initiatives, North East Cambridge Townscape Strategy, June 2021

²⁷

<https://democracy.cityoflondon.gov.uk/documents/s150565/VU.CITY%20MODEL%20QUALITY%20AND%20ACCURACY%20STATEMENT.pdf>

3.2.2 There are three non-designated heritage assets on the NEC Site. These are a WWII pillbox, pair of semi-detached houses and The Old Cottage along Cowley Road. See Section 3.7.

3.3 Listed Buildings

3.3.1 There are no statutorily listed buildings on the NEC Site or within 500m of the Site.

3.3.2 There are 5 Listed Buildings, or clusters of Listed Buildings within 1km of the NEC Site (Figure 8). These are:

- Church of St George, Chesterton – Grade II listed (NHL 1245573)
- Cluster of 4 Grade II listed buildings at the north eastern end of Ferry Lane Conservation Area (see below)
- Cluster of 3 Grade II and 1 Grade I listed buildings at the southern end of Riverside Conservation Area (see below)
- Cluster of 16 Grade II and 4 Grade II* listed buildings at the western and north western edge of Fen Ditton Conservation Area (see below)
- Biggin Abbey – Grade II* Listed (NHL 1178408) and Wildfowl Cottage – Grade II listed (NHL 139672) within Baits Bite Lock Conservation Area (see below)
- Cluster of 6 Grade II listed buildings and 1 Grade II* listed building at the southern end of Milton Conservation Area (see below)
- Memorial Stone c. 40m North of Cambridge to Histon Railway – Grade II listed (NHL 1127367)

Church of St George

3.3.3 The Church of St George (NHL 1245573) is Grade II listed and located within Chesterton and dates to 1937-8 and was designed by Thomas H Lyon. It is constructed from brown brick with stone dressings with an unusually prominent northwest tower. It is located within a similar period suburb. Despite its prominent tower, which is very much out of scale with the surrounding residential scale

buildings, the tower disappears very quickly from view when moving more than a few streets away. The NEC Site in its current form does not contribute to the setting of this listed building, however given the scale of development there is potential for the proposals to form a new backdrop to the Church. Therefore, the impact on this asset arising from the proposals will be assessed.

Memorial Stone c. 40m North of Cambridge to Histon Railway

3.3.4 The Memorial Stone c. 40m North of Cambridge to Histon Railway dates from 1849 and commemorates Mrs Eliza Woodcock. The NEC Site does not contribute to the setting of this listed building.

3.3.5 In addition to the listed buildings within 1km of the NEC Site, additional listed buildings have been identified in the wider area which have may have intentional or historically designed views towards the NEC Site, or which potentially include the Site. These have been identified through consultation with the Cambridge City Council's Conservation Officer and Historic England. These additional assets are Cathedral of the Holy Trinity, Ely and Denny Abbey.

Cathedral of the Holy Trinity, Ely

3.3.6 Cathedral of the Holy Trinity, Ely (NHL1331690) is the Grade I listed "Ely Cathedral", just under 20km from the NEC Site to the northeast. Begun in 1083, it was virtually completed in its present form by 1350 after which no further major building took place. The splendid architecture of the Cathedral is the dominating influence of the small scale, mainly 18th and 19th century town which clusters around it.

3.3.7 The distinctive silhouette of Ely Cathedral is visible from considerable distances in the surrounding landscape²⁸. It is a prominent landmark within the surrounding area, with eight quintessential views identified in the wider landscape. The view from Stretham, along the A10 looking north towards Ely is the most impressive

²⁸ <https://www.eastcambs.gov.uk/sites/default/files/PE24%20Ely%20Quintessential%20Views%20Rpt.pdf>

long-distance view of the Cathedral, where it rises high above a line of trees, unhindered by surrounding development.

3.3.8 Though views of Ely Cathedral are possible and prominent in the surrounding landscape, the distance of Cambridge from Ely i.e. 20km makes the structure just about visible from elevated positions when there is clear visibility due to weather conditions. It is remarkable that the structure is visible at this distance which is due to its topographic setting on an island of high ground, surrounded by low-lying ground and its prominent tower being a landmark on the skyline. Elevated locations where Ely Cathedral may be visible at a considerable distance on the skyline within Cambridge include from the tower of Great St Mary's Church. Views outside of the city from elevated positions such as Wandlebury, c. 7km to the south east of Cambridge are also possible on a clear day in the very far distance. No locations have been identified within the NEC site where views of Ely Cathedral are possible from.

3.3.9 Views of Ely Cathedral from Cambridge looking across the NEC Site are very occasional and a more minimal aspect of the Cathedral's significance and are not referenced in the 'Review of Ely Quintessential Views'²⁹. Potential impacts on changes to views of Ely Cathedral and views from Ely Cathedral to the south which may include the NEC Site should, however, be assessed.

Denny Abbey

3.3.10 *Denny Abbey* (NHL1127360 – Grade I listed building; NHL1012770 – Scheduled Monument) is located c.6.75km to the northeast of the NEC site just outside of Waterbeach. This is the remains of a Benedictine abbey church from c.1150 with later C12 and C13 additions by Knights Templars. It was converted to a Franciscan nunnery in C14 and farmhouse after the Dissolution with further C18 and C19 alterations. Denny Abbey is unusual in that it housed three successive and very

²⁹ <https://www.eastcambs.gov.uk/sites/default/files/PE24%20Ely%20Quintessential%20Views%20Rpt.pdf>

different religious orders. The early date of the surviving fabric of the nunnery, its successive use and the surviving archaeological remains which provide clues as to how the land was utilised and the environmental conditions contribute to its significance. Denny Abbey is c. 11km to the north of the NEC Site, just to the east of the A10 with considerable planting and intervening development surrounding and comprising the former Waterbeach Barracks and Airfield and the Cambridge Innovation Park just to the south. The NEC Site is not visible in its current form and does not contribute to the asset's setting. Given the distance and the level of intervening development and planting in the immediate and wider area, changes within the NEC the site is still very unlikely to be visible from this location. Therefore, this heritage asset does not require assessment.

- 3.3.11 The impact of the proposals on the NEC Site on the significance of Church of St George in Chesterton and Ely Cathedral will be assessed. The impact of the proposals on the clusters of listed buildings within Conservation Areas as noted above will be assessed more holistically as part of the Conservation Areas as required (see Section 3.5).

3.4 Scheduled Monuments

- 3.4.1 The southern part of a Scheduled Monument is within 1km of the NEC Site (see Figure 11) – this being the Multi-phased settlement east of Milton (NHL 1457437).
- 3.4.2 There are a further 8 Scheduled Monuments which are over 1km but within 3km (see Figure 10), 3 of which are located to the northeast of the site, one near Histon and the others within the urban area of Cambridge. These are as follows:
- Cambridge Castle Mound (NHL 1006905).
 - Car Dyke (NHL 1006930)
 - Chesterton Abbey (NHL 1006907)
 - Civil War earthworks at the Castle (NHL 1006886)
 - Horningsea kilns, site of (NHL 1006895)

- Moated site 140m south westsouthwest of Histon Manor (NHL 1019181)
- Old Cheddar's Lane pumping station (NHL 1006896).
- Shrunken medieval village of Landbeach (NHL 1006870)

3.4.3 The Multi-phased settlement east of Milton derives its significance from the good survival of archaeological deposits from the Roman to medieval period, for the diverse range of archaeological features and for its close spatial relationship to the 13th century Church of All Saints within Milton.

3.4.4 The majority of Scheduled Monuments within the wider 3km study area derive their significance from the survival of archaeological features and historic association with places in their immediate vicinity. Their significance is not derived from wider strategic positioning or vistas with a designed intent to channel views or panoramas. One exception to this is Cambridge Castle mound (NHL 1006905).

3.4.5 Cambridge Castle Mound was originally built immediately following the Norman Conquest, located on the old Roman Road from London to York to strategically provide control over this route. It was constructed as a standard motte and bailey design, with subsequent re-modelling in stone and addition of possible towers³⁰. It was re-fortified during the Civil War and further structures added and removed up to the 19th century which have largely resulted in the loss of any surviving ditches of the bailey. The Castle now survives as a 10m high motte, which stands on the highest point in the city. It is one of the few publicly accessible viewpoints over the City and a crucial link in being able to appreciate the development and nature of Cambridge as well as understanding the site as a defensive structure over a strategic area and transport network. Long-distance views are possible in all directions with a number of landmark buildings seen in the fore and middle ground. There are some trees at higher level on the mound which limit to some extent some views to the northeast.

³⁰ https://www.heritagegateway.org.uk/gateway/Results_Single.aspx?uid=MCB2268&resourceID=1000

3.4.6 The impact of the NEC Site development on the significance of the Cambridge Castle Mound will be assessed.

3.5 Conservation Areas

3.5.1 There are 4 Conservation Areas within 500m of the NEC Site (Figure 9):

- Riverside and Stourbridge Common
- Fen Ditton
- Baits Bite Lock
- Milton

3.5.2 Additionally, Ferry Lane is within 1km of the NEC Site.

3.5.3 In the wider rural area are the Conservation Areas of Histon, Histon and Impington, Impington St Andrews and Horningsea which are all around 1.5 – 2.5km from the NEC Site.

3.5.4 Within the built-up area of towards the city core of Cambridge are Chesterton, De Freville, Central and Castle and Victoria Road Conservation Areas which are all located within 1.5 – 2.5km of the NEC Site. Again, these are unlikely to require further consideration given their location within a very built-up area surrounded by intervening development.

3.5.5 The following section describes the Conservation Areas within 2.5km of the NEC Site since these are most likely to be impacted by development of the NEC given their proximity, and in most cases, rural surroundings with limited intervening development.

Riverside and Stourbridge Common Conservation Area

- 3.5.6 The Riverside and Stourbridge Common Conservation Area encompasses the stretch of the River Cam from Victoria Bridge at the western end to the City Boundary to the east and includes Ditton Meadows. The Conservation Appraisal was produced in March 2012, at which time it was originally incorporated within the Central Conservation Area but has since been designated separately. The Area includes the river frontages, towpaths, adjacent meadows, and the Brunswick area on the north side of Newmarket Road which is made up of streets of two or three-story gault brick terraced housing. It includes large areas of common land and open fields including Midsummer Common, Stourbridge Common and Ditton Meadows, the slow-moving section of the River Cam and the adjacent, set-back villas which combine to form an integral part of the green wedge which permeates into the city centre.
- 3.5.7 The landscape is relatively flat and the scale of the buildings and river crossings are generally all two to three storeys, with little in the way of prominent features punctuating the skyline, with the exception of the pumping station chimney. In those open green spaces, there is dense tree planting to the edges where they meet housing, but more openly planted at the edges of the river which often buffers the built-up areas beyond. The open spaces, River and yet proximity to terraced streets and the core of Cambridge make it a much-used focus for informal and formal recreation. Midsummer Common is more open in character but with a backdrop of planting along the line of the River Cam and development in the backdrop. Stourbridge Common though more rural in feel is more thickly planted around the edges and Ditton Meadows is more open and naturalistic. A number of the listed buildings within the Conservation Area (Chapel of St Mary Magdalene, Roundhouse, Paper Mills and The Globe Public House) are at the most south westerly end of the Conservation Area to the south of Midsummer Common and are tightly packed within terraced streets, or line Newmarket Road which is quite a dominating element marking a break in the more rural and tranquil character.

- 3.5.8 Longer distance important positive views³¹ look northeast along the line of the Cam from Stourbridge Common and towards Ditton Meadows and to the west and southwest from Midsummer Common. These longer distance views also capture the kinetic more sequential aspect of views with the accompanying sensory experience of moving along the River Cam and the rural green either side of it. Shorter distance important positive views³² are important directly across the River Cam to the northern side of the Cam.
- 3.5.9 The setting surrounding the Riverside and Stourbridge Common Conservation Area includes open spaces adjacent to the River to the north and suburbs beyond. To the south and west further suburbs and some light industrial areas. There are very limited long-distance views along the Cam corridor itself rather than to the north and north-west beyond the Conservation Area. Though there is a strong element of intervening development and planting in the background of views out of the Conservation Area and across the River, the NEC Site has the potential for form the backdrop to some of the views across the Common and the River Cam. The NEC Site makes no contribution to the significance of the Conservation Area and the listed buildings contained within however new development with the NEC Site could become visible and form a backdrop and so changes to these views and the significance of the Riverside and Stourbridge Common Conservation Area should be assessed.

Ferry Lane Conservation Area

- 3.5.10 The Ferry Lane Conservation Area is a small parcel of land on the north side of the River Cam immediately opposite the Riverside Conservation Area and includes the south west end of Water Lane up to the River³³. Like Riverside, the special character of Ferry Lane is strongly associated with its position adjacent to the River, where early historic buildings are grouped around the river's edge. They highlight the

³¹ <https://www.greatercambridgeplanning.org/design-heritage-and-environment/historic-environment/conservation-areas/#a18> Appendix 3 - Maps

³² *ibid*

³³ <https://www.greatercambridgeplanning.org/media/1629/riverside-and-stourbridge-common-conservation-area-appraisal-2012.pdf>

importance of water transportation, and one of the main features are the large houses on irregular plots dating from the 16th to the 19th century. This Conservation Area does not have the same rural open feel as some part of the Riverside and Stourbridge Common Conservation Area, but it is intimate with strong connections to the river. The focal point looking northwest from the River is the Green Dragon Inn and Water Street running east-west. There are positive views looking west from the end of Water Street and east and southwest along the River Cam. There are no open views out of the Ferry Lane Conservation Area looking northwest where the NEC Site would be in the distance. Therefore, the NEC Site makes no contribution to the significance of the Conservation Area and the listed buildings contained within and new development would be unlikely to be visible. Therefore, this asset will not be assessed.

Fen Ditton Conservation Area

- 3.5.11 The Fen Ditton Conservation Area continues north along the River Cam from the Riverside Conservation Area. It also extends eastwards to incorporate the village of Fen Ditton and its numerous listed buildings. Unlike Conservation Areas further south and towards to City which all have a backdrop of suburbs, Fen Ditton has a very rural feel to it, surrounded by open space and with a tranquil riverside setting.
- 3.5.12 There are two parts of Fen Ditton, The Green which is part of the historic core stretching along the River from the Church northwards to The Biggin, and then the linear medieval village spreading eastwards along High Ditch Road. The traditional vernacular style cottages add to the charm and individuality of the townscape, with channelled views down the road with mature trees on either side. Emerging out at the meadows is a surprising experiential change, with sudden longer distance views across the Cam and low-lying green space beyond.
- 3.5.13 The NEC Site area is not visible from these areas, but its low-lying nature for the most part enables it to disappear into the backdrop of the fens from locations on the western edges of Fen Ditton. The NEC Site contributes to this Conservation Area

as a result of its low-lying nature and ability to keep intact the surrounding views of fenland and flat open landscape. New development with the NEC Site could become visible and form a backdrop and so changes to these views and the significance of the Fed Ditton Conservation Area should be assessed.

Baits Bite Lock Conservation Area

3.5.14 Baits Bite Lock Conservation Area forms the boundary between Milton and Fen Ditton, with the lock dating from 1700 acting as the centre piece, surrounding by a small number of buildings³⁴. At the southern end of the Conservation Area is Biggin Abbey, a Grade II* listed building which although approached through an avenue of trees is surrounded by a flat landscape with low level hedges enabling an appreciation of the surrounding fenland. The Conservation Area epitomises the open area and flat fenland landscape in this part of Cambridgeshire with a tranquil and picturesque lock on the river at its centre. Along the lock and River itself are mature trees lining the banks. There are views out from the lock to the east, west, south along the river and southwest towards the A14 carriageway. Views emerge and open out and close down depending in the coverage of mature trees lining the bank whilst travelling down the river. The new station hotel to the immediate east of the NEC Site can be seen over the A14 from the track on the eastern bank of the River Cam adjacent to Baits Bite Lock. In its current form, the NEC Site area is not visible from the Conservation Area and does not contribute to its significance, even though there are wider views of the flat fenland landscape. The A14 likely limits some longer distance views, however the NEC Site, due to its relatively low scale of development enables the retention of views out of flat open landscape which may change with new development. The visibility at isolated locations of the new Station Hotel building indicates that there may be visibility of new taller development on the NEC Site. Therefore, changes to views out of the Conservation Area will be assessed.

³⁴ <https://www.greatercambridgeplanning.org/media/1564/baits-bite-lock-conservation-area-appraisal-2006.pdf>

Milton Conservation Area

- 3.5.15 Milton Conservation Area is focussed tightly around the village centre of Milton just under 1km north of the NEC Site Area. Milton is a medieval village with manor house at its centre, and a long history of occupation from at least the Roman period. At its heart it has cottages of vernacular construction but is mostly surrounded by modern development particularly to the west and south of the medieval core and therefore clear views particularly south and west are obscured. Milton Hall itself is surrounded by a dense belt of woodland vegetation, with potential views to the east and west toward the fen landscape beyond the settlement boundaries.
- 3.5.16 The NEC Site area, though only 1km from the village, in its current form does not feature in views due to intervening development around the village and the presence of the A14 at the southern end of the village and therefore does not contribute to its significance. New development within the NEC could form the backdrop to views south and so could alter the character of the Conservation Area and therefore should be assessed.

Impington St Andrews

- 3.5.17 This discrete Conservation Area is focussed on St Andrew's Church and the immediate roads surrounding, i.e. the historic core of Impington. St Andrew's Church is an early 13th century church with tower with various periods of rebuilding. The Conservation Area includes the traditional green setting surrounding the church, winding lanes with clusters of tree planting, and a mix of buildings of differing styles and periods. It is quite enclosed given the maturity of planting on the edges, particularly to the southeast though there are some views out of the Conservation Area to the north. The Conservation Area is located c. 1.7km to the northwest of the NEC Site.

3.5.18 There are limited views out of the Conservation Area due to the tree planting and there is a significant shelter belt of planting to the south and south east of the village, limiting views in this direction. The majority of views out to the open countryside are to the north of the Conservation Area, and these are not long-distance views. The NEC Site does not make a contribution to the setting of this Conservation Area in its current form and change within the NEC within the likely parameters set for development are very unlikely to be alter the character of the Conservation Area. This Conservation Area does not require further assessment at this stage.

Histon and Impington Conservation Area

3.5.19 The Conservation Area includes the original manor, Parish Church of St Andrew, historic buildings along Church Street and the High Street. There is considerable intervening development surrounding the more historic core, particularly to the south and east where Histon and Impington has expanded over the years, together with the A14 widening and upgrade.

3.5.20 The Conservation Area is located c. 2.5km to the northwest of the NEC Site. Views out to the open countryside are possible at the northern end of the Conservation Area but take in views north and east so do not include the NEC Site. The NEC Site does not make a contribution to the setting of this Conservation Area in its current form and change within the NEC within the likely parameters set for development are very unlikely to be alter the character of the Conservation Area. This Conservation Area does not require further assessment at this stage.

Horningsea Conservation Area

3.5.21 The Horningsea Conservation Area is located just to the north of Baits Bite Lock. Focussed on the village centre, with the Church of St Peter at its heart, it also includes cottages and clusters of farmhouse buildings. The Conservation Area is located c. 1.5km from the NEC Site.

3.5.22 Key vistas tend to be from the High Street looking east and west, together with a views from the western edges of the village onto the river. Views south out of the village include the A14. The NEC Site does not make a contribution to the setting of this Conservation Area in its current form and change within the NEC within the likely parameters set for development are very unlikely to be alter the character of the Conservation Area. This Conservation Area does not require further assessment at this stage.

3.5.23 The impact of the NEC Site development on the significance of the Conservation Areas at Riverside and Stourbridge Common, Fen Ditton and Baits Bite Lock will be assessed.

3.6 Registered Parks and Gardens

3.6.1 There are 6 Registered Parks and Gardens within 3km of the NEC Site, all of which are located within the Cambridge city core or southern suburbs and are either cemeteries or related to the University Colleges (see Figure 10).

3.6.2 These 6 Registered Parks and Gardens comprise:

- Mill Road Cemetery – Grade II (NHL 1001561)
- St John’s College – Grade II* (NHL 1000632)
- Christ’s College – Grade II (NHL 1000616)
- Histon Road Cemetery – Grade II* (NHL 1001569)
- Emmanuel College – Grade II* (NHL 1000619)
- Trinity College – Grade II (NHL 1000633)

3.6.3 Given the built environment immediately surrounding these heritage assets resulting in a considerable level of intervening development, their often enclosed and somewhat private nature and planting within and outside of these assets, the NEC Site does not contribute to their settings.

- 3.6.4 There are a further 3 Registered Parks and Gardens within 6km (see Figure 10) which are located within rural locations on the northeastern to northwestern rural hinterland of the NEC Site: Madingley Hall, the American Military Cemetery and Anglesey Abbey.

Madingley Hall

- 3.6.5 Madingley Hall (NHL 1000627) is a Grade II Registered Park and Garden which lies approximately 5.5km to the west. The Registered site covers c. 80 hectares of parkland surrounding Madingley Hall at its centre, bounded by the village to the east. Views east over the village taken in Cambridge in the distance, channelled by trees and planting. The principal building, Madingley Hall is orientated to the east, with views towards Cambridge from elevated positions within the Hall. The gently sweeping drive eastwards over a sham bridge and curving towards the hall reveal the Brownian landscape designed by Lancelot Brown.
- 3.6.6 The NEC Site is 5.5km from the Hall with considerable intervening development including the village of Madingley itself and development further towards Cambridge including Arbury, Orchard Park and King's Hedges as well as infrastructure such as the M11 and considerable tree belts and planting. These elements, including Cambridge itself have an urbanising effect in the distance at night time due to lighting in the backdrop of rural shorter and mid distance views. The NEC Site although at a considerable distance could theoretically be visible given the elevated topography and the open view to the east over towards Cambridge and down the formal approach from this direction (see Figure 13). Whilst the NEC Site does not contribute to the setting of the Hall in its current form, its potential visibility from the Madingley Hall and impacts on its significance arising from development of the NEC Site will need to be assessed.

American Military Cemetery

- 3.6.7 The American Military Cemetery (NHL 1001573), also known as the Cambridge American Cemetery, is a Grade I Registered Park dedicated in 1956 and located near Madingley. Following the Second World War, 3182 American Servicemen and Women were re-interred at this cemetery. The cemetery occupies a rural site on the north slope of a hill with extensive views northwards and towards Ely Cathedral on a clear day. Though there are extensive views from this ridge line to the east and that likely take in the City of Cambridge, and the NEC Site area c. 5km to the north west, the cemetery itself is orientated to take in views in a more northerly direction (see Figure 13). Views could however be visible of the NEC Site, therefore the potential impact on this asset will need to be assessed.

Anglesey Abbey

- 3.6.8 *Anglesey Abbey* (NHL 1000611) is a Grade II* Registered Garden, just outside Lode and just over 5km from the NEC Site. Centred on a former Augustinian priory dating from the 13th century, earthworks in the garden still mark the location of fishponds and drains. Following its dissolution in the 16th century, the gardens were remodelled over the centuries. The entrance approach is orientated north-north-west lined with a yew hedge. Within the gardens are a complex network of vistas, avenues, and walks punctuated by statuary. One of the principal avenues (Coronation Avenue³⁵) lined with mature trees is orientated south west, towards Stow Cum Quay and onwards towards Cambridge Airport (see Figure 14). There is considerable planting within the grounds with extensive tree belts and areas of mature woodland immediately to the north, south and west with thinner tree belts also to the east. Whilst there are areas of open lawn, experiences of large areas of open sky or longer distance views are punctuated and limited by mature dense tree avenues or woods.

³⁵ <https://www.nationaltrust.org.uk/anglesey-abbey-gardens-and-lode-mill/documents/anglesey-abbey-new-map.pdf>

3.6.9 The NEC Site is located more to the west rather than south-west and so is unlikely to be at the pinnacle of a long distance vista, however the potential impact on this asset will need to be assessed given that it may form minor aspects in any wider longer distance views.

3.6.10 Impacts arising from the development of the NEC Site on the significance of Madingley Hall, the Cambridge Military Cemetery and Anglesey Abbey will be assessed.

3.7 Non-Designated Heritage Assets

Locally Listed Buildings

3.7.1 There is one locally listed building within 250m of the NEC Site (Figure 8). This is the Golden Hind Pub (BLI0270). Built by the Tollemarch Brewery in 1930s, it is a Mock Tudor brick building with extensive tall chimneys and tall gothic gables. Triple sash windows with lancet windows above apparently based on the design of Helmingham Hall in Suffolk. The pub was constructed as a result of c. 1,000 new houses being built around the Milton Road area at this time. In a sea of otherwise very ordinary buildings, the Golden Hind is an interesting landmark at the crossroads of King Hedges Road and Milton Road. The nearby NEC Site does not directly contribute to the setting of the building, given the intervening development and infrastructure including the guided busway but it does add an element of architectural flair and is a useful marker to add a sense of character and the Site could form a low-level backdrop to the building. This asset will need to be assessed.

3.7.2 A further 5 locally listed buildings³⁶ are within 1km of the site which include the following:

- 305-307 Milton Road (Ref: BL10478)

³⁶ <https://www.greatercambridgeplanning.org/historic-environment/buildings-of-local-interest/>

- Ditton Walk, The Old Maltings (BL10090)
- Newmarket Road, Barnwell Junction Station Platform Building (BL10280)
- Milton Road, No.241 (BL10269)
- Ferry Lane, Nos 2 to 4 (BL10116)

3.7.3 These locally listed buildings have been identified because of their architectural merit and, in some cases, because of their historical associations. They may contribute to and help to define the character of the townscape of an area or be significant in the historical and architectural development of the city. Many of these buildings are 19th and 20th century buildings. Their identification enables the safeguarding of the buildings and to ensure that repairs, alterations and extensions are sympathetic to their character.

3.7.4 The assets will not need to be assessed, given the distances from the Site itself and their merit as locally significant characterful examples of architecture within the city.

Other Non-Designated Heritage Assets

3.7.5 On the NEC Site itself, very little in terms of built heritage assets survive, given its agricultural past and the level of redevelopment in the 1970s onwards.

3.7.6 There are three non-designated heritage assets which are thought to survive on the NEC Site:

- WWII Pillbox on Cambridge Science Park (MCB16399) identified on the western side of Milton Road (see Figure 1)
- The Old Cottage on Cowley Road, dating to the development of the Sewage Farm, first shown on the 1901 OS map and subsequently extended over the years, presumably used by the Principal Engineer / Manager of the Sewage Farm (see Figure 3 and 4)

- Pair of semi-detached houses along on Cowley Road, first shown on the 1901 OS map, presumably used by workers of the Sewage Farm (see Figure 3 and 4)

3.7.7 The pillbox is a surviving remnant indicating the historic use of the area during WWII. It no longer relates to its wider setting, being located within the Science Park and is of very minor significance.

3.7.8 The Old Cottage and pair of semi-detached houses are related to the Sewage Works. They are of very limited heritage value with numerous Edwardian houses of this style existing within Cambridge, but they do indicate the initial period of construction of the Sewage Farm in the early 20th century.

4.0 CONTRIBUTION OF NEC SITE TO KEY CHARACTERISTICS OF CAMBRIDGE

4.1 Important / Critical Elements

4.1.1 As set out in the Strategic HIA - Baseline, Section 3 and 4, not every aspect of the Cambridge and its setting makes a significant contribution to its identity. There are a number of Important / Critical elements and some more notable contributions as well as other minor aspects. With regards to the NEC Site, the following are the principal relevant elements which may require assessment depending on the nature of the growth option scenarios brought forward to the Site.

Important / Critical elements

- Strongly defined historic core with its principal buildings and numerous local views and interrelationships between the manicured Cam and the remarkable architecture of the colleges and City
- Rural character of the River Cam corridor with its meadows including Midsummer Common, Jesus Green, The Backs, Coe Fen, Lammas Land, Ditton Meadows and Stourbridge Common (including VPs 11 and 13)
- Prominence of key historical landmarks in views across the city, especially from the west / southwest e.g. from Grantchester Meadows (VP5) and Red Meadow Hill (VP3)
- The spatial and visual relationship between Castle Mound and Historic Core, including the panoramic view from the mound (VP1)

4.2 Contributory and Minor Elements

Contributory elements

- The physical separation between the major modern developments and the historic core
- Relationship to rural landscapes beyond the 19th and 20th century development of the city

- Road approaches from the west i.e. the A1303 (Hardwick Road) and A603 (Barton Road) including VP2 and VP4
- Presence of other historic landmarks in the skyline of the City

Minor elements

- Road approaches from northwest through to the north including VP12
- Relationships between the City and Girton, Milton and Histon
- Modern landmarks in the City's skyline
- Views from elevated ground to the southeast over the city which enable an appreciation of its development and change including VPs 7, 8, 9 and views from Limekiln Hill
- Views from east flanks of the City including VP1 and extensive views from the A11

5.0 HERITAGE SENSITIVITIES INFLUENCING TOWNSCAPE STRATEGY

5.1 Introduction

- 5.1.1 The Townscape Strategy (June 2021)³⁷ sets out a spatial townscape framework for North East Cambridge under a number of topic headings, providing a high-level guide to how the NEC should be built out to ensure a high-quality environment, characterful places and a joined-up approach across sites.
- 5.1.2 The Townscape Strategy is influenced by a number of factors, including heritage sensitivities. The baseline report of this HIA has identified a number of assets and characteristics which require consideration for establishing the Townscape Strategy. Consideration of these heritage assets and their particular sensitivities should provide parameters for development in the NEC within the Townscape Strategy in order to minimise the impact on heritage assets. The Townscape Strategy has therefore been developed in an iterative way, to take account of these specific sensitivities and outline parameters for development in such a way as to minimise harm to these heritage assets and their significance.
- 5.1.3 Summarised below are the key heritage sensitivities which have been identified within the baseline work for this HIA to be taken into account during development of the Townscape Strategy. Following on from that, design parameters for development are outlined which take into account the key heritage assets and which underline the development of the Townscape Strategy.

5.2 Heritage Sensitivities

- 5.2.1 The key heritage sensitivities and characteristics that require consideration within the Townscape Strategy include:

³⁷ Urban Initiatives, North East Cambridge Townscape Strategy, June 2021

- *Fen Ditton Conservation Area*

5.2.2 Mid-rise or taller buildings could begin to appear in the backdrop in views from the western edge of the Conservation Area when looking westwards over the River and Ditton Meadows towards the NEC and beyond the Cambridge North Station development. These views are a characteristic element of the Conservation Area as they represent the relationship between the village and its rural surroundings of open space, river corridor and views of meadows and fenland. Views of numerous mid-rise and taller buildings could form a further urbanising element to what is a feature of this rural village and alter one of the key characteristics of Cambridge in terms of its green River Cam corridor edged by meadows.

5.2.3 Views from within the core of the Conservation Area i.e. within the village along the High Street are unlikely to be visible unless heights of over 13 storeys are proposed.

- *Baits Bite Lock Conservation Area*

5.2.4 Taller buildings could begin to appear in the backdrop of views looking southwest, where the character is currently very rural and views out of the Conservation Area consist of flat fenland landscape with very limited visibility of Cambridge. Views of consistent areas of development in the distance would create an urbanising feel to a secluded rural location.

- *Riverside & Stourbridge Common Conservation Area*

5.2.5 Taller buildings could begin to appear in the backdrop behind low and mid-rise suburban development beyond the River Cam corridor across Stourbridge Common and Logan's Meadow altering the characteristic views of the River corridor and green edge with low-rise suburban development beyond.

- *Horningsea Conservation Area*

5.2.6 Very tall buildings have the potential to appear in some views, however these would have to be at such a scale to appear over the A14 and embankment which is currently visible. The visibility of tall buildings would alter the rural feel of this Conservation Area.

- *Castle Mound SM & LB*

5.2.7 Taller buildings or buildings of a consistent height could affect views from Castle Mound in terms of its panoramic views of the surrounding city and landmarks as well as more distant views out to the edges of the City, where taller buildings within the NEC could form a backdrop.

- *Ely Cathedral*

5.2.8 Taller buildings could affect long distance views of Ely Cathedral from elevated historic positions within the core of the City including the tower of Great St Mary's Church where taller buildings within the NEC could interrupt or terminate views.

Registered Parks and Gardens of Madingley Hall, American Military Cemetery and Anglesey Abbey

5.2.9 Taller buildings could affect designed lines of view from Madingley Hall, American Military Cemetery and Anglesey Abbey where taller buildings within the NEC could terminate or become a focal point in the view and night time lighting could increase the urbanising feel in the distance.

- *Grade II Listed Church of St George, Chesterton*

5.2.10 Taller buildings could affect immediate views of Church of St George where taller buildings could form a backdrop or overtop the tower or could be over-dominant in scale in the backdrop of views.

5.3 Recommended Design Parameters

5.3.1 In order to avoid / minimise impacts to the key sensitivities outlined above, the following design parameters are suggested:

- Siting taller buildings away from the more sensitive eastern and southeastern edge of the NEC site to avoid an urbanising effect on the rural character of wider views

in Fen Ditton and from Baits Bite Lock and in views from Riverside and Stourbridge Common Conservation Area

- Keeping taller buildings (i.e. 10-13 storeys) as occasional 'markers' in the landscape rather than the predominant height to avoid an 'urbanised' wall of development effect in the backdrop of wider views from elevated positions such as Castle Mound, the tower of Great St Mary's Church and from nearby rural open locations such as Baits Bite Lock Conservation Area and Fen Ditton
- Siting taller buildings so that they do not terminate or form the focal point of designed lines of view from Madingley Hall, American Military Cemetery and Anglesey Abbey
- Siting of taller buildings to avoid terminating or interrupted views of Ely Cathedral from the elevation historic positions within the core of the City including from the tower of Great St Mary's Church
- Limiting the taller buildings to c. 13 storeys (assuming a typical storey height of 3m) as buildings above 13 storeys are likely to be out of scale and create visually intrusive elements which could result in unacceptable changes in views from or towards heritage assets
- Dropping down the heights of buildings where they interface with surrounding existing development, to avoid being an over-dominant presence, particularly to the south of the NEC near to The Golden Hind pub and to the east near to Fen Ditton and Baits Bite Lock Conservation Areas
- Siting taller buildings to avoid overtopping or appearing in the backdrop of Church of St George, Chesterton when viewed from its immediate south
- Using a palette of colours which are more characteristic of the 'earthy' or muted spectrum of colours seen in Cambridge. These colours should generally be recessive in the wider landscape to minimise their visual intrusion and create a harmonious fit within surroundings and skyline
- Using materials which are more characteristic of the materiality seen in Cambridge which would include masonry facades, brick or sturdy materials. Use of reflective materials including glass should be more limited as this is more out of character in the wider Cambridge context and will act as too much of a focal point in views from and towards heritage assets, therefore creating visual intrusion

5.3.2 The Townscape Strategy whilst setting out a range of parameters and design guidance is not a fully detailed and designed development in itself. Further, more detailed design work will need to be undertaken for specific developments which are proposed within NEC Site as part of the planning process. These proposals would also require more detailed impact assessment in support of planning applications, including heritage assessment when designs have been more fully realised.

6.0 SUMMARY OF TOWNSCAPE STRATEGY

6.1 Introduction

6.1.1 The draft Townscape Strategy³⁸ has developed a Spatial Framework to deliver development within a series of design parameters which have taken into account the heritage sensitivities identified within this HIA. The Townscape Strategy is summarised in Figure 8.1 entitled Illustrative Masterplan for NEC, which demonstrates how the area could be built out using the parameters and following the principles within this report. The Townscape Strategy should not be a considered a straight-jacket or final product. Developers of each site must fully test their designs against impacts on heritage, landscape, resident amenity, daylight and sunlight, wind and other factors, and so in reality site layouts and building footprints may differ from those shown in the Illustrative Masterplan of Figure 8.1 in the Townscape Strategy. The key principles that are set out below have enabled the production of a Spatial Framework that considers height, massing, public realm and landscaping, materiality, colour palettes, transport, connections and uses and establishes parameters for the acceptability of these aspects within future developments on the Site.

6.2 Key Principles

6.2.1 The following key principles of the Townscape Strategy should guide development proposals in NEC:

- Consideration of the sensitivities of heritage assets to development;
- The retention and enhancement of existing natural features like watercourses, trees and public spaces as the structuring elements of the place;

³⁸ Urban Initiatives, North East Cambridge Townscape Strategy, June 2021

- A medium density, mid-rise approach to development throughout NEC, with a small number of taller buildings only in exceptional circumstances and in the right locations;
- A clear hierarchy of street users, with people walking at the top, then cyclists, then public transport, and finally private vehicles as lowest priority;
- Streets as public spaces, not (just) as movement corridors or as parking locations;
- Sufficient mixing of uses to avoid the need to drive for everyday needs;
- The creation of fine grain, street-based urban blocks as the fundamental organising component of NEC;
- Distinct character areas with visual edges, but with seamless movement throughout; and
- The use of materials and colour should be informed by those prevailing in Cambridge.

6.3 Description of Townscape Strategy

6.3.1 The Townscape Strategy has applied best practice principles whilst also responding to the wider context of Cambridge and the NEC area itself. Figure 4.1 on page 30 sets out a broad spatial vision for the NEC with character areas, locations of central nodes and the principal structuring elements that will define the townscape of North East Cambridge in the future. Figure 4.6 goes further in setting out the land use in the proposed character areas. The Townscape Strategy includes a number of key elements namely:

- Mixed use spine that stretches along the guided busway and the First Public drain and connects Cambridge Regional College in the north with Cambridge North Station in the south
- A District Centre to act as a focus of town centre activities
- Urban living quarter potential supported by local facilities, schools and commercial development

- Mixed industrial quarter with a mix of workspaces, industrial uses adjacent to the railhead and on the eastern side with the western edge wrapped by residential development as a more transitional element
- Office Campus development in a green setting through retention of parts of Cambridge Science Park and St John's Innovation Park
- Chesterton Fringe around the Nuffield Road area transforms into a residential neighbourhood and transitional area between Chesterton and the NEC with potential primary school
- The provision of a regional college

6.3.2 NEC will include a mix of walking, cycling and public transport all prioritised over private car use with a network of integrated ways to move around and through NEC. There should also be a number of public spaces throughout the NEC Site including a neighbourhood open space, parks, green buffers and corridors and high-quality public realm.

6.3.3 Heights of buildings are proposed to be of a medium rise urban scale, delivering gentle densities through compact development form. The maximum height of the majority of buildings will be between 4 and 7 storeys in order to accommodate the number of planned homes and commercial spaces whilst also considering the landscape and heritage sensitivities. Heights, however, will differ between character areas with the tallest buildings in the District Centre, with heights gradually reducing towards the edges of the NEC at transitional boundaries such as King's Hedges and Chesterton as well as on the eastern and northern eastern edge close to the Fen edge and the heritage assets located in this area. Broadly, there are a small number of local landmark buildings located at visually prominent places to provide legibility, distinctiveness and variation in character and are broadly spread across the NEC Site but marking key nodes and gateways. In addition, a single district landmark building is also proposed up to 13 storeys within the District Centre at the triangle site between Milton Road and Cowley Road. An additional potential local landmark up to 5 storeys has been proposed on the western side of the NEC Site,

but the acceptability of this structure would depend on detailed impact assessment which considered the impacts on potential views of Ely Cathedral.

6.3.4 The Townscape Strategy also proposes how larger sites should be broken down into smaller, more fine grained plots with differentiation on architectural style, materiality and form. Materiality is also suggested that takes inspiration from the mixture materials which are more prevalent in Cambridge and the hues which are more commonplace. Broadly, whilst there is a wide spectrum of materials and colours seen in Cambridge there is a regular common language of architecture seen in solid, sturdy materials such as masonry facades and brickwork. The colour palate includes more muted earthy tones. Whilst developments should strongly consider this influence, there is also a need for differentiation, particularly to reflect land use and gateway sites but these need to avoid stark contrasts with surrounding and prevailing materials.

6.3.5 Overall, when considering the totality of these elements a Spatial Framework with Illustrative Masterplan is shown in Figure 8.1 within the Townscape Strategy which draws together the elements of design and requirements for the NEC Site but also takes into consideration in the sensitivities of heritage assets through:

- The siting of tall buildings to avoid terminating views at the end of designed avenues of heritage assets with sensitive settings including Anglesey Abbey and Ely Cathedral
- Ensuring the majority of buildings will be 4-7 storeys in height
- A small limited number of local landmark buildings up to 7-8 storeys in height spread across the site rather than clustered in a single location to create variation without creating a tall-topping or wall of development effect on the skyline when seen from elevation positions such as Castle Mound, Wandlebury and Madingley Hall
- Limiting tall buildings to a district landmark of 13 storeys within the District Centre, alongside a small cluster of 8-10 storey buildings within this District Centre location

- Stepping down the heights of buildings at the edges of the NEC Site to better integrate with adjacent existing urban forms and avoid a jarring contrast between existing development and new development when seen in views particularly from the south looking north
- Limiting taller buildings on the eastern and north eastern fringe of the NEC Site to avoid an urbanising effect on Conservation Areas of Baits Bite Lock Conservation Area and Fen Ditton Conservation Area
- Recommendations on materiality that will blend well with existing development and not be a stark contrast to existing palettes and materials

6.3.6 The Townscape Strategy with accompanying figures, in particular the Illustrative Masterplan shown on Figure 8.1 creates a Spatial Framework which can be used at high level to assess the likely impacts arising from development on heritage assets.

6.3.7 Further work undoubtedly will need to be undertaken once further detailed design has taken place and as part of the planning application process. This is likely to include detailed assessment using a range of tools including simple wireframes, photomontages, viewsheds and zones of theoretical visibility and 3D modelling alongside site visits.

7.0 IMPACT ASSESSMENT ON HERITAGE ASSETS WITHIN THE SITE

7.1 Impacts on Archaeological Remains

7.1.1 Archaeological deposits are known to exist across the NEC Site with the prehistoric and Roman periods most represented, however there has also been considerable ground disturbance through construction of the College, Science Park and its associated infrastructure. In addition, the creation of the Milton Road slip road off the A14, and the sewage beds have also caused ground disturbance. Where archaeological remains exist they are likely to be fragmented or to have been removed, particularly in areas which have been highly disturbed (See Figure 7 in Appendix A). Archaeological remains could survive in areas which are less highly disturbed.

7.1.2 The implementation of the Spatial Framework (as set out in the Townscape Strategy and summarised in the Illustrative Masterplan Figure 8.1³⁹) for the NEC Site should be undertaken with consideration of the potential for buried archaeological remains. In areas which are less highly disturbed a programme of archaeological evaluation should be undertaken and discussed with Cambridgeshire Historic Environment Team.

7.1.3 Further assessment and potentially fieldwork is likely required to determine the extent and potential for buried archaeological remains once more detailed designs come forward as part of the planning application process.

7.2 Impacts on Built Heritage Assets

7.2.1 Given the small scale of the pillbox, it is assumed that this can be retained within the proposals for the NEC Site. Therefore, this asset will not be affected.

³⁹ Urban Initiatives, North East Cambridge Townscape Strategy, June 2021

7.2.2 The proposals as set out in the Townscape Strategy for the NEC Site will require removal of the Old Cottage and pair of semi-detached houses as part of the development of the masterplan. These assets are of very limited heritage value and architecturally not significant particularly given their extensions and change in surrounding context. Their historic association with the early phase of the Sewage Farm is interesting, but again given the loss of the Sewage Farm their surrounding context would otherwise be lost even if they were retained. The loss of these non-designated heritage assets will result in the removal of some building of very limited heritage value.

8.0 IMPACT ASSESSMENT ON DESIGNATED AND NON-DESIGNATED HERITAGE ASSETS OUTSIDE OF THE SITE

8.1 Introduction

8.1.1 The following section outlines the possible impacts arising from the implementation of the Spatial Framework (as set out in the Townscape Strategy and which is summarised on the Illustrative Masterplan Figure 8.1⁴⁰) for the NEC Site on the significance of designated and non-designated heritage assets outside of the NEC Site. Impacts have been assessed using a range of techniques including simplified ZTV modelling, use of VuCity model to produce sample views from key locations, Google Earth and aerial imagery alongside professional judgement. The VuCity modelling sample views are labelled A to L in Appendix C.

8.1.2 The assessment of the impact on these heritage assets is summarised below based on the parameters and illustrative plans set out in the Townscape Strategy. Further assessment work will be required to determine the impacts on these heritage assets once more detailed plans come forward through the planning process. Developments should include further detail on height, form, materiality, siting, lighting and use, public realm and landscaping as suggested within the Townscape Strategy and as discussed in Section 6 of this report. Tools used to assist in the assessment process are likely to include wireframes, annotated photographs, photomontages and 3D modelling alongside site visits to verify information.

8.2 Listed Buildings

Church of St George, Chesterton - Grade II listed (NHL 1245573);

8.2.1 The Church is c. 540m to the south of the NEC Site (see Figure 8 in Appendix A). Though it is a more prominent element in its immediate surroundings, it very

⁴⁰ Urban Initiatives, North East Cambridge Townscape Strategy, June 2021

quickly disappears from view when moving to the more major roads, such as the Milton Road.

- 8.2.2 The proposals, as outlined in the Townscape Strategy, have been designed to include a sensitive mid-height development which fits within the surrounding context height, and to only include tall buildings where this is appropriate as landmarks and defining gateways within the Site (see Townscape Strategy). The buildings within the NEC Site will therefore not be of such a scale to be visible in views of the Church of St George, nor form a backdrop to it. Therefore, there will be no change to the setting of the Church and its significance will not be harmed.

Cathedral of the Holy Trinity, Ely - NHL1331690 (Grade I)

- 8.2.3 The distance from Ely Cathedral to Cambridge is approximately 23km and approximately 20km from the NEC Site. Given this distance, there are few locations where Ely Cathedral may be visible as a very minor feature on the distant skyline. The elevated positions where Ely Cathedral may be visible include the tower of Great St Mary's Church in the centre of Cambridge, alongside other less sensitive locations such as the Grand Arcade multi storey car park. Views from these sites in the direction of Ely, will include the proposals at the NEC Site. These will appear as minor elements of development forming a low-level backdrop to the existing intervening development on the northern side of Cambridge and will not shorten these views. The taller buildings planned as part of the proposals have been sited away from the lines of sight between Great St Mary's Church when looking towards the potentially visible Ely Cathedral (See Figure 12 in Appendix A). The NEC Site will not interrupt views from the elevated position of Wandlebury outside of the city, where Ely is visible in the distance due to its location on the eastern edge of Cambridge.
- 8.2.4 Views from Ely Cathedral are very unlikely to take in views that include the taller elements of the NEC Site due to the distance, intervening development including the villages to the south and the A14, topography and considerable planting. The

scale of the proposals together with the distance means that the new elements will not be visible above treelines.

8.2.5 The proposals will therefore not affect the significance of Ely Cathedral and its setting in terms of its visibility at very long distances including elevated positions of Cambridge, or its dominance in the wider landscape in quintessential views in particular on approach to Ely from the south along the A10.

8.2.6 There will be no change to the setting of the Cathedral and its significance will not be harmed.

8.3 Scheduled Monuments

8.3.1 Figures F1 and F2 in Appendix C developed from VuCity Modelling, show the view from the Cambridge Castle Mound looking to the northeast towards the NEC Site. Figure F1 indicates that taller elements would be visible in longer distance views without vegetation, where the Site would appear as part of the backdrop of urban and suburban development. The landmarks seen from the Castle Mound in the historic core and beyond would not be obscured by the development and would still be legible. The NEC Site would not overtop these landmarks or compete with them by forming a prominent backdrop.

8.3.2 Assuming that the proposals include a careful consideration of materials and palette of colours, the NEC Site will be barely discernible as a new element in the distant backdrop of the city, particularly with vegetation as shown in Figure F2 in Appendix C. There will be no change to the setting of Cambridge Castle Mound and its significance will not be harmed.

8.4 Conservation Areas

Riverside and Stourbridge Common

- 8.4.1 Figures A to C in Appendix C indicate potential views of the proposals from within the Conservation Area.
- 8.4.2 Using VuCity modelling, without trees, shows elements of the proposals on the NEC Site above existing development. Proposals would also appear in views from Stourbridge Common and Ditton Meadows (see Figures B1 and C1 in Appendix C). In all cases the development would be seen behind existing development and would not alter the current rural character of the meadows; a character defined by an urban / suburban fringe contrasting with a rural meadow. The VuCity model images also exclude trees. Figures B2 and C2 provide examples of views with trees and leaves modelled which would soften any direct views further.
- 8.4.3 Important aspects of the Conservation Area would remain unaffected including the longer distance views north east along the Cam to Ditton Meadows and to the west and south west to Midsummer Common. Shorter views over the Cam and looking towards the NEC Site are shown in Figure A1 in Appendix C, from Riverside Bridge where there are occasional taller elements of new development, forming a minor backdrop over the existing suburban buildings in the fore and middle ground. Again, this would be softened considerably by vegetation.
- 8.4.4 Figures B1 in Appendix C show the view across Stourbridge Common (without trees) with the proposals are not discernible. Figure B2, with vegetation, shows views of any proposals on the NEC Site would not be possible. The views across Stourbridge Common would remain unaffected by the proposals.
- 8.4.5 Figure C1 in Appendix C showing views across Ditton Meadows, without trees, indicate that the proposals would be visible in the background across the Meadows and to the rear of the new existing development around North Cambridge Station. This is lower in scale to the existing new building, and to the rear of lower scale

development. Figure C2 shows a more realistic view with vegetation, which is an important attribute across the meadows. The tree line largely screens the proposals from view, so that the only new and obvious element is the existing new development around the North Cambridge Station. Therefore, the views across Ditton Meadows may change with further development being visible in the backdrop, during winter but this may slightly urbanise the backdrop of views in this location.

- 8.4.6 Overall, the proposals would not dominate or alter the open, rural character of these areas, the longer distance key views up and down the River Cam, and the shorter distance views north wards across the River Cam where proposals are barely visible. The only exception to this is views from Ditton Meadows, during winter where there would be a limited strengthening of the urban backdrop to the rear of the new North Cambridge Station buildings. This is a very minor element of change in one portion of the Conservation Area which could be mitigated through additional planting on the banks of the River Cam, particularly across from Ditton Meadows, where appropriate, to screen or soften views of the proposals.
- 8.4.7 Assuming a sensitive approach is taken to the design of the proposals, there would be a very low level of harm to the setting of the Conservation Area, at the lowest end of the scale of less than substantial harm.

Fen Ditton Conservation Area

- 8.4.8 The Conservation Area is divided into two parts; The Green following the River up to The Biggin and then later medieval village spreading eastwards from the Church. The later medieval village would be unaffected by the proposals as indicated in Figure J1 (without trees) and J2 (with trees) as the development, topography and existing screening would prevent views out of the village.
- 8.4.9 At the western end of the Conservation Area there is still considerable screening, but suddenly opportunities for views across the meadows and over the River Cam are possible. The upper elements of the proposals may be visible as occasional taller

buildings projecting above existing intervening development. These will be at a reasonable distance and so will not be dominating or in the foreground but will alter views. The church, the village and their relationship with the meadows and River will be maintained. Assuming a sensitive palette of materials and colours are chosen, these should not be prominent features, particularly with the existing level of screening at the western edge of the village and across the other side of the River Cam.

8.4.10 There are opportunities to increase the planting on the opposite side of the River Cam to screen views of both the new development within the NEC Site but also of the larger North Cambridge Station buildings in the foreground. This would soften the visibility of proposals and help to re-establish the more rural feel at the edge of this Conservation Area.

8.4.11 There will be a very low level of harm, at the lowest end of the scale of less than substantial harm, on the Fen Ditton Conservation Area as a result of the very minor changes to some views out of the Conservation Area.

Baits Bite Lock

8.4.12 Figure G1 in Appendix C indicates the longer distance views from the Conservation Area that, without trees, would include views of the proposals and in particular the taller building elements which project above the development. This would be seen over the existing A14 carriageway where open longer distance views are possible and Figure G2, with trees show a more realistic largely screened view in the direction of the NEC Site. New elements which may be visible do not alter the views of surrounding open flat fenland landscape, but they could intensify the appearance of development in the background, indicating the start of the city scale development beyond the A14. Development is very unlikely to be seen as an extensive element (see Figures G3 and G4), however glimpses of new buildings are likely to be seen whilst moving along the River corridor. Thus, an element of suburban character will extend its influence into the countryside to a limited extent.

8.4.13 Additional planting could be considered along the banks of the River Cam to soften the visibility of proposals, however this must be balanced with retaining the open fenland feel in this rural location.

8.4.14 There will be a very low level of harm, at the lowest end of the scale of less than substantial, on the Baits Bite Lock Conservation Area as a result of the very minor changes to some longer distance views out of the Conservation Area.

Milton Conservation Area

8.4.15 Whilst the Conservation Area is only 1km north of the NEC Site, there is considerable development to the south where the modern extension of Milton around the historic core has occurred. Added to this is the A14 carriageway and the raised Milton interchange roundabout. There is also considerable planting both within the village and to the south east around Todd's Pit. Given the level of intervening development and planting, it is very unlikely that the proposals will be visible apart from very occasional glimpsed views. Considering the scale of modern intervening surrounding Milton and its position just off the A14, the proposals are not considered to affect the character of the Conservation Area and will not affect its significance.

8.5 Registered Parks and Gardens

Madingley Hall

8.5.1 Madingley Hall (NHL1000627) is c. 5.5km from the NEC Site and Grade II registered. Given the elevated position of Madingley Hall and the long distance views to the east over the village and beyond to Cambridge, Figure H1 in Appendix C gives an indication of views from this aspect. The location of Figure H1 i.e. the sample view from Cambridge Road, is approximately 0.5km further east towards Cambridge due to the limitations of the 3D modelling in this location. This shows that the proposals are potentially visible in the distant backdrop beyond an extensive concentration of

intervening development from the lawn to the east of the Hall and from elevated positions looking east within the Hall itself. Figure H2, with trees, shows that much of any visible new development is screened, however the upper elements of taller buildings may be visible above the tree parapet. There may be minor additional elements of visibility during night time through illumination with the new development. The potential visibility of these elements are at such a distance and only the uppermost elements that form a backdrop of intervening development which is already illuminated at night time, that they do not create an intensification of development or create a dominant new element in views. Therefore, the proposals do not harm the significance of Madingley Hall.

Cambridge American Cemetery

- 8.5.2 As with Madingley Hall, Figure H1 and H2 provide an indication of views of the proposals which are not a dominant element at this distance, c. 5km from the Grade I registered American Military Cemetery (NHL 1001573). For the Cambridge American Cemetery, given that views are also orientated to the north east, views of proposals and the city of Cambridge would only be glimpsed at the very edges of wider panoramic views. Tree planting immediately to the east of the Cemetery, not available in the VuCity modelling at this distance, would also limit visibility. Again, any views of proposals are at such a distance and at the edge of historically designed long distance views, the proposals do not harm the significance of the Cambridge American Cemetery.

Anglesey Abbey

- 8.5.3 Anglesey Abbey (NHL 1000611) is c. 5km to the northeast of the NEC Site and Grade II* registered. The entrance approach is orientated north-north-west lined with a yew hedge and so views would not take in the proposals. Within the gardens are a complex network of vistas, avenues, and walks punctuated by statuary with a large element of woodland planting to the north, west and south. One of the principal avenues (Coronation Avenue) lined with mature trees is orientated southwest,

towards Stow Cum Quay and onwards towards Cambridge Airport. Views from the end of this avenue largely take in the rural areas to the south west of Anglesey Abbey and so any views of the NEC from this location would be at the very eastern edge of a panorama. The mature tree planting to the west of the parkland would likely screen out views in that direction (see Figure 14 in Appendix A). The A14 is also a considerable intervening line of infrastructure. Given the very low-lying land in this direction, which continues southwest towards Cambridge, the position of the NEC in relation to the orientation of views, the height of anticipated development (all below 8 storeys or below with the exception of the district landmark building) plus the distance from the NEC Site, there are limited or no opportunities for elevated long-distance views over Cambridge and towards the NEC Site. Given the distance, and the well planted nature of the surrounding landscape there is potential opportunities for additional planting to screen any isolated visible elements of the new NEC Site which may be visible. The proposals are not considered to harm the significance of Anglesey Abbey.

8.6 Locally Listed Buildings

Golden Hind, Milton Road

- 8.6.1 At the busy interchange of Milton Road and Kings Hedges Road, the Golden Hind is an interesting architectural style which given the surrounding suburban development, provides a relatively low-profile element of unexpected interest. Its principal eastern façade faces onto Milton Road, although the southern façade onto Kings Hedges Road is still embellished. The proposals are c. 250m to the north. The proposals will introduce new elements on the southern edge of the NEC Site, though this will be sensitively achieved through increasing the scale of new buildings gently along the Milton Road rather than on the immediate boundary. Views of the proposals will be possible when looking north along the Milton Road, however assuming a sensitive palette of materials and colours, they will not be an overbearing element or affect the immediate setting of the locally listed pub or its

appreciation. The proposals will therefore not harm the significance of the Golden Hind locally listed building.

9.0 IMPACT ASSESSMENT ON KEY CHARACTERISTICS OF CAMBRIDGE

9.1 Introduction

9.1.1 The following assesses the potential impact of the Spatial Framework proposals (as set out in Illustrative Masterplan within the Townscape Strategy⁴¹) on the elements of Cambridge's Character and Setting set out in Section 4 of this report.

9.1.2 The assessment has made extensive use of the Cambridge VuCity model with the proposed outline layout and building heights modelled in that. This is a working model which reflects local terrain and is subject to change as development proposals come forward. It is considered that the model will give a robust basis for assessing potential impacts.

9.1.3 Additionally, this section outlines a number of potential considerations regarding height and materials that should be taken into account as the proposals and guidance for the NEC are taken forward.

9.2 Potential impacts - Important / Critical elements

“The strongly-defined historic core with its prominent buildings and numerous local views and interrelationships between the bucolic River Cam and the remarkable architecture of the colleges and City”

9.2.1 The proposals would, at most, rarely and only minimally appear in the backdrop of views of the historic core of the City from along the Cam or from within the core itself. Analysis of the VuCity model identified no views of the development from the immediate corridor of the Cam towards the City or from ground level locations within the historic core. The analysis was not however exhaustive but does demonstrate that the development at the proposed heights does not have an appreciable impact on this key element of Cambridge's character and setting.

⁴¹ Urban Initiatives, North East Cambridge Townscape Strategy, June 2021

“The rural character of the River Cam corridor with its meadows including Midsummer Common, Jesus Green, The Backs, Coe Fen, Lammas Land, Ditton Meadows and Stourbridge Common (including VPs 11 and 13)”

- 9.2.2 The development would not intrude into views from the meadows to the immediate west and south of Historic Core inc. Midsummer Common, Jesus Green, The Backs, Coe Fen and Lammas Land.
- 9.2.3 The development would however appear in some views from the more northerly meadows. For example, it may be visible from locations on Logan’s Meadow / Riverside Bridge (see Figure A1 in Appendix C). Here VuCity modelling, without trees, shows elements of the development above existing development. It would also appear in views from Stourbridge Common and Ditton Meadows (see Figures B1, B2 and C1, C2 in Appendix C). In all cases the development would be seen behind existing development and would not alter the current rural character of the meadows; a character defined by an urban / suburban fringe contrasting with a rural meadow. The VuCity model images also exclude trees – Figures B2 and C2 provide examples of views with trees and leaves modelled.
- 9.2.4 In summary, the development would not be a dominate element in views or alter this overall rural characteristic of Cambridge.

“Prominence of key historical landmarks in views across the city, especially from the west / southwest e.g. from Grantchester Meadows (VP5) and Red Meadow Hill (VP3)”

- 9.2.5 Figures D1, D2, E1 and E2 in Appendix C show example views from Grantchester Meadows and Red Meadow Hill.
- 9.2.6 Based on the massing and height assumptions included within the Townscape Assessment, it may be possible to see glimpses of the very tallest elements of new development in the backdrop of views over the city from Grantchester Meadows (see D1 and D2 in Appendix C). These elements would be barely discernible in views.

9.2.7 From Red Meadow Hill (see E1 and E2 in Appendix C) the upper part of the development would potentially be visible, vegetation allowing. The development would sit behind existing major modern development including West Cambridge Campus and away from the Historic Core (which sits to the right of the view). The development would be a small element of the view and would not dominate or challenge the views of and over the Historic Core - neither would it compete.

“The spatial and visual relationship between Castle Mound and Historic Core, including panoramic view from mound (VP1)”

9.2.8 Figures F1 and F2 in Appendix C shows the view from VP1 (with and without trees). While the development would, potentially be visible in views particularly in winter, it would sit away from the Historic Core and would not interfere with the spatial and visual relationship between the Castle and Core.

9.3 Potential Impacts - Contributory element

“The physical separation between the major modern developments and the historic core”

9.3.1 The NEC site lies at a considerable distance from the core and in views is clearly read as separate to it. It would maintain clear physical separation from the Core.

- *“Relationship to rural landscapes beyond the 19th and 20th century development of the city”*

9.3.2 The development would mark a substantial change to the scale of development along the northern edge of Cambridge and would create a harder boundary with rural landscapes beyond – however locally those landscapes have been subject to considerable change around Milton and the impact on the relationship is therefore more limited.

9.3.3 Of note, would be a slight change to views from the north along the River Cam towards Cambridge e.g. from Baits Lock area. Currently, Cambridge hardly features in these views (although the A14 is a strong presence and the cranes mark the city).

The proposed development may, with low levels of vegetation, be visible above the A14, marking the new extent of the City and extending its influence into the countryside (see Figure G1 – G4).

“Road approaches from the west i.e. the A1303 (Hardwick Road) and A603 (Barton Road) including VP2 and VP4”

9.3.4 The distance between the development and the road approaches limits visibility. From Barton Road (which sits on lower ground), there would be virtually no visibility of the development, at most a fleeting glimpse.

9.3.5 Views from the elevated lengths of Hardwick road may include passing glimpses of the development in the distance beyond the West Cambridge Campus and other modern development (see Figure E1 and E2), these views would however be limited in nature and largely screened by vegetation for much of the year.

“Presence of other historic landmarks in the skyline of the City”

9.3.6 It is possible that the taller elements of the development may feature alongside other spatial landmarks in the city e.g. prominent church towers. No significant conflicts have been identified through the VuCity model but more detailed analysis will be required should development be brought forward.

9.4 Potential Impacts - Minor elements

“Road approaches from northwest through to the north including VP12”

9.4.1 The proposed development would present a marked change to the current approaches with a larger, stronger built form. Its impact will largely be governed by the design and materials.

“Relationships between the City and Girton, Milton and Histon”

9.4.2 The development would mark a substantial change to the scale of development along the northern edge of Cambridge and would result in considerable change

around Milton in particular. It would further bridge the gap between the City and the village.

“Modern landmarks in the City’s skyline”

9.4.3 No impacts are predicted.

“Views from elevated ground to the southeast over the city which enable an appreciation of its development and change including VPs 7, 8, 9 and views from Limepit Hill”

9.4.4 View 8 would feature the development in visual proximity to the airport. It would be a clear feature when vegetation was at its lowest. It would not significantly alter the character and form of the view and the historic core would be clearly visually separated from the development (See Figures K1, K2 and L1 – L3 in Appendix C for views from the south and south east of Cambridge)

“Views from east flanks of the City including VP10”

9.4.5 The development would be barely perceptible, if visible at all, from View 10, and other lower locations around the east side of the City.

9.5 Height and design response

9.5.1 The current proposals for the NEC site include a limited number of tall buildings with a single landmark of up to c. 13 stories in height with a smaller number of c.7-8 storey buildings across the site. The 13 storey building marks what is considered to be the tallest development possible on the site without significant risk of harm to Cambridge and its setting. Heights above this, both in terms of the general height of development and of landmark buildings, are very likely to result in greater harm to the setting and character of Cambridge as buildings will begin to intrude into a wider range of views and potentially dominate the local area. Great care needs to be taken at the planning application stage to ensure that proposals do not exceed these heights in order to not have significant harm on Cambridge and its setting.

9.5.2 Additionally, design of buildings and their materiality will be critical to minimising potential harm. The use of visually recessive materials will help reduce the visual intrusion of any taller structures in views across and from within the City.

9.5.3 A combination of height management and appropriate materiality should significantly reduce the risk of harm, alongside consideration of whether additional planting could be used to strengthen tree belts and screening in the appropriate places to soften the visibility of new elements.

9.6 Conclusion

9.6.1 The current outline proposals for the NEC site are unlikely to result in significant or notable harm to the setting of Cambridge as long as maximum and typical heights are managed and appropriate materials are used. There will be some limited changes which would result in harm at the lower end of the scale of less than substantial harm. This would need to be weighed against the wider public benefits of the proposals.

10.0 SUMMARY AND RECOMMENDATIONS

10.1 Impacts on heritage assets on the NEC Site

10.1.1 Impacts on heritage assets on the NEC Site may include removal of archaeological remains surviving within the Site. There is limited potential given the extent of previous ground disturbance, however this may need further archaeological evaluation or monitoring and consultation with the Cambridgeshire Historic Environment Team.

10.1.2 Impacts on built heritage assets will involve the loss of The Old Cottage and a pair of semi-detached houses. These are of very limited heritage value but as indicated in paragraph 197 of the NPPF⁴², a balanced judgement in determining any application will be required that considers the significance of the heritage asset and their loss.

10.2 Impacts of heritage assets outside of the NEC Site

10.2.1 There will no discernible changes to the setting and the significance of the following heritage assets:

- Church of St George, Chesterton - Grade II listed building
- Cathedral of Holy Trinity, Ely - Grade I listed building
- Milton Conservation Area
- Cambridge Castle Mound - Scheduled Monument
- Madingley Hall – Grade II Registered Park and Garden
- Cambridge American Cemetery – Grade I Registered Park and Garden
- Anglesey Abbey – Grade II* Registered Park and Garden

10.2.2 There will be minor changes to the views from three Conservation Areas; Stourbridge and Riverside, Fen Ditton and Baits Bite Lock. These minor changes will introduce new elements as a result of the proposals at the NEC Site. They will not

⁴² <https://www.gov.uk/guidance/national-planning-policy-framework/16-conserving-and-enhancing-the-historic-environment>

change the fundamental characteristics of the Conservation Area and their significances, but slightly alter a limited number of longer distance views or be seen as repeated minor new elements in views whilst moving through Conservation Areas. This could potentially intensify views of the existing development and edge of Cambridge when looking west and southwest. These changes will not result in significant or notable harm as long as a sensitive application of materials and palette, alongside suitable heights being managed. These limited changes which would result in harm at the lowest end of the scale of less than substantial harm.

10.3 Impacts on Key Characteristics of Cambridge

10.3.1 As outlined above, the proposals are unlikely to result in significant or notable harm to the setting of Cambridge and its key characteristics, assuming a sensitive application of materials and palette, alongside suitable heights being managed (see Sections 5 and 6 above). These changes are likely to result in harm at the lower end of the scale of less than substantial harm and would need to be weighed against the wider public benefits of the proposals.

10.4 Recommendations

10.4.1 Within the NEC Site, care should be taken to retain the WWII pillbox and avoid its removal during development.

10.4.2 In terms of ground conditions and the survival of archaeological remains within the NEC Site, in areas which are less highly disturbed (see Figure 7), a programme of archaeological evaluation should be undertaken. This should be devised in consultation with the Cambridgeshire Historic Environment Team. In areas which are highly disturbed, no further archaeological evaluation will be required, but a programme of archaeological monitoring during construction is likely to be needed. Again, this should be discussed with the Cambridgeshire Historic Environment Team.

- 10.4.3 In terms of future more detailed design, care should be taken to consider the spatial framework set out in the Townscape Strategy and the Heritage Sensitivities identified within this HIA to minimise or avoid harm to heritage assets. Elements of detailed design which will require careful thought include heights, siting of taller elements, architectural form and detailing, massing, materiality, lighting, uses, public realm and landscaping.
- 10.4.4 Opportunities for additional planting within the NEC Site could be considered to help screen and soften the visibility of new elements in wider views, in particular:
- The eastern edge of the NEC Site where it bounds the trainline, in order to soften the visibility of development from the western edge of Fen Ditton Conservation Area
 - Mature planting within proposed green space network areas to break up views of taller local or district centre landmark buildings
- 10.4.5 Should there be any opportunities in future to provide additional planting through development proposals or wider council environmental or green infrastructure proposals, the following locations should be considered:
- Along the banks of the River Cam within the Stourbridge and Riverside Conservation Area, particularly around Ditton Meadows
 - On the western bank of the River Cam in front of the North Cambridge Station buildings to soften visibility of the proposals from the western edge of Fen Ditton Conservation Area
 - Along the banks of the River Cam near to Baits Bite Lock where the proposals become visible in gaps in planting, however this must be balanced with not undermining the open fenland landscape in this location
 - In key individual locations within the wider landscape should there be glimpsed views of the proposals from the end of Coronation Avenue at Anglesey Abbey

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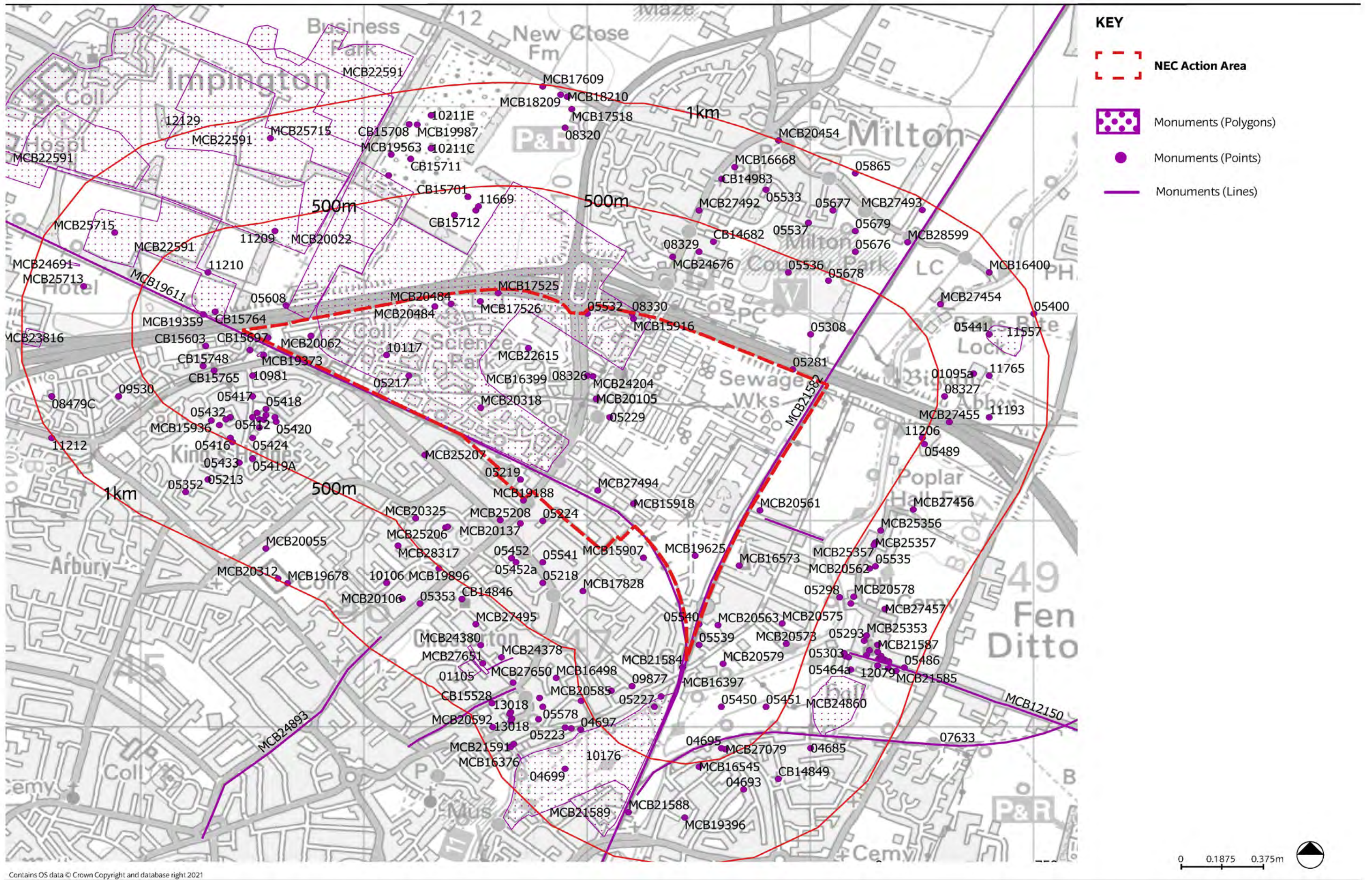
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APPENDIX A – HIA FIGURES

Figure 1: Sites and finds identified on the Cambridgeshire Environment Record



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Figure 3: OS Map dated 1901

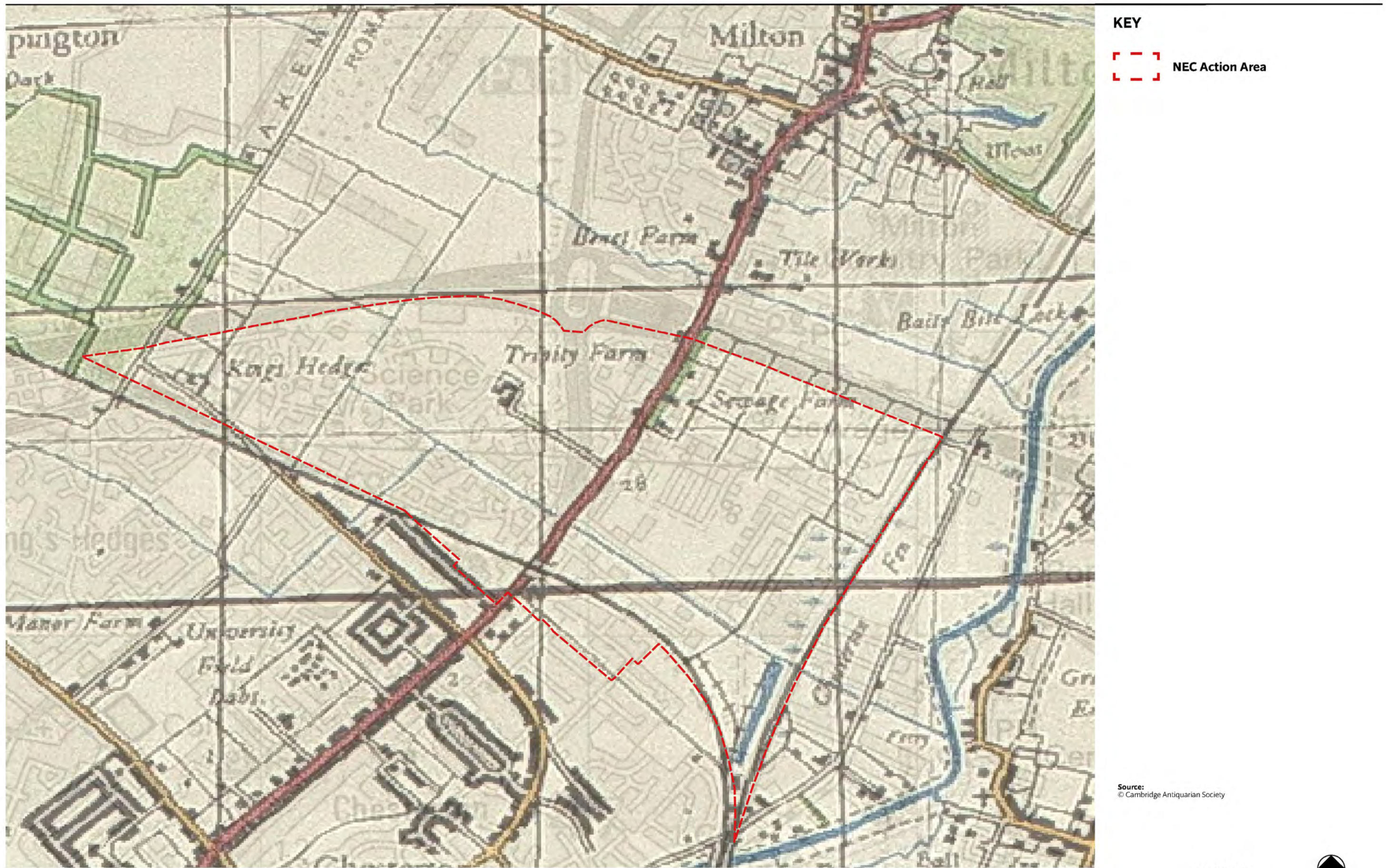


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Not To Scale

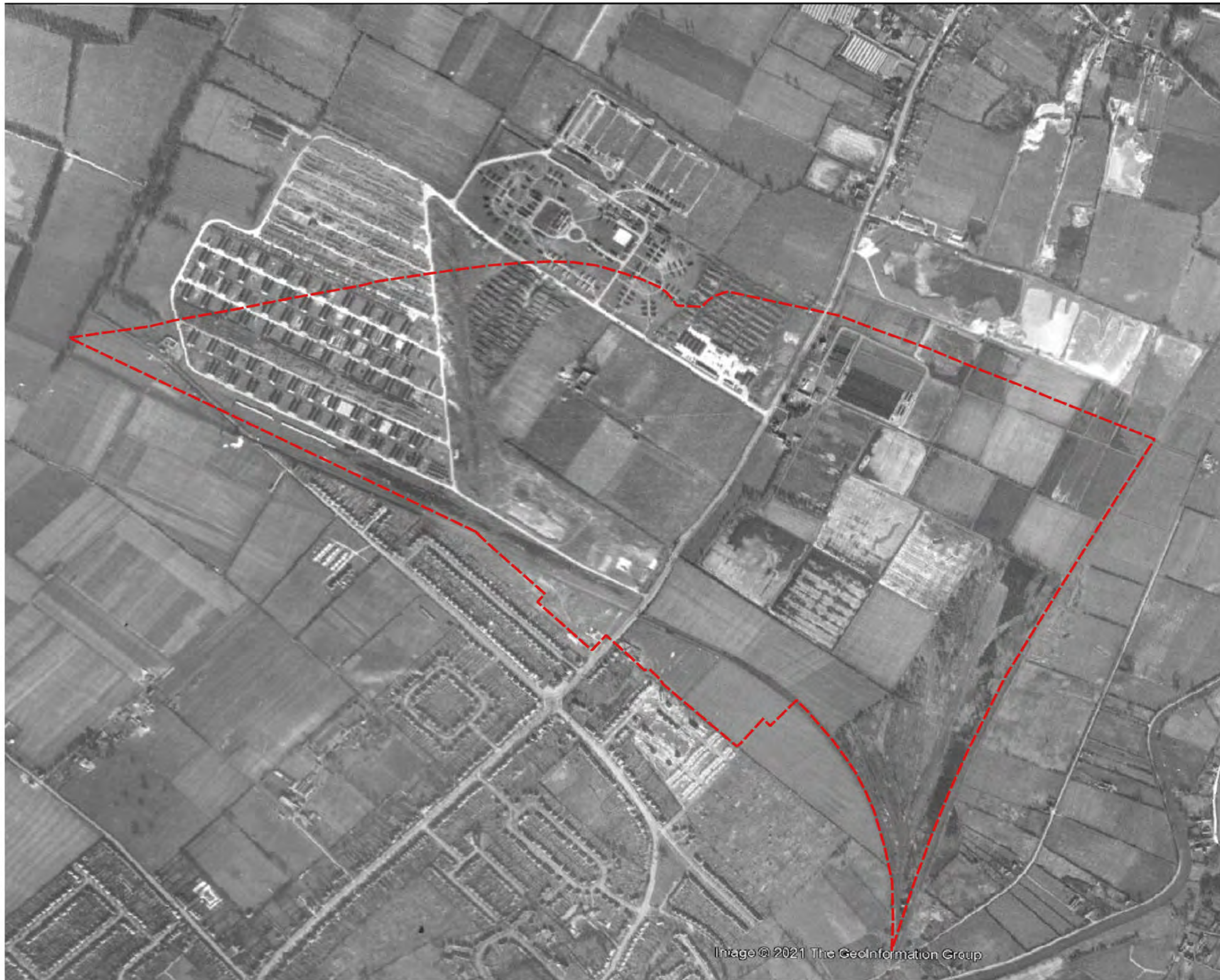


Figure 4: 1936 Map showing the sewage farm overlain on modern OS Map



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Figure 5: Historic Aerial Image from 1945



KEY

 NEC Action Area

Source:
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Figure 6: Historic Aerial Image from 1999



KEY

 NEC Action Area

Source:
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Figure 7: Likely ground disturbance



Figure 8: Listed buildings and locally listed sites within 1km of the site

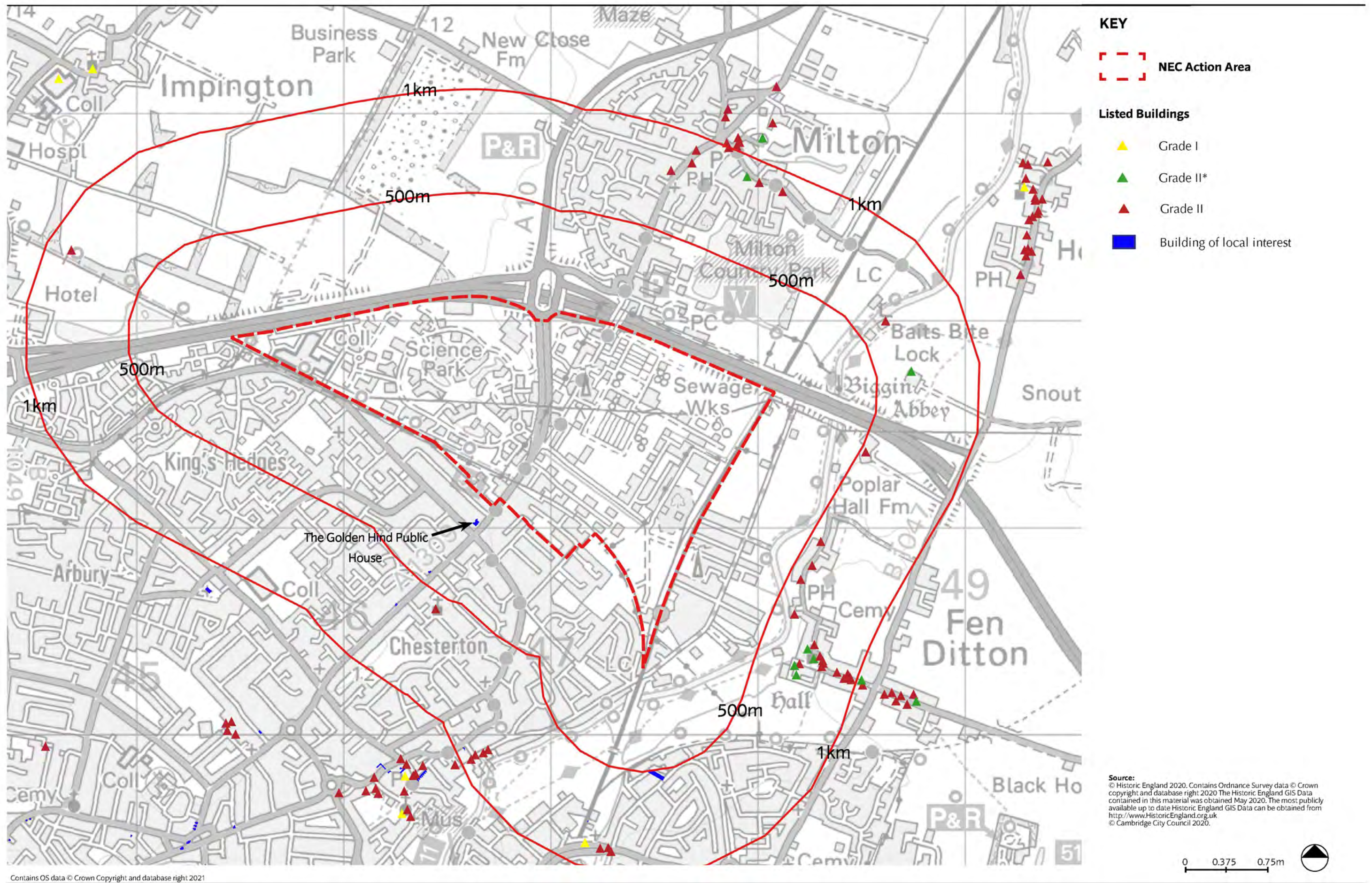
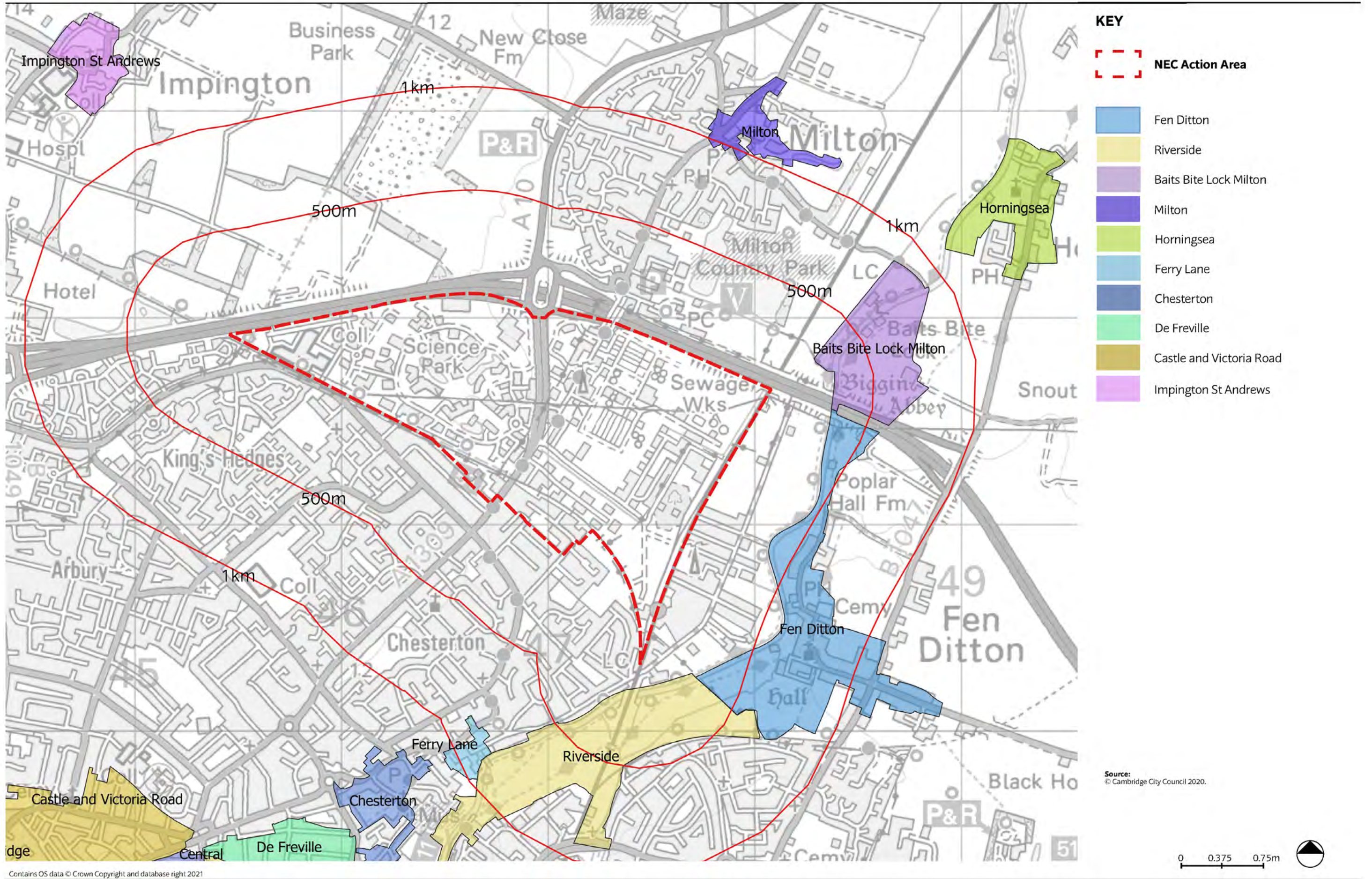


Figure 9: Conservation Areas within 1km of the site



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Figure 10: Registered Parks and Gardens within 6km of the site

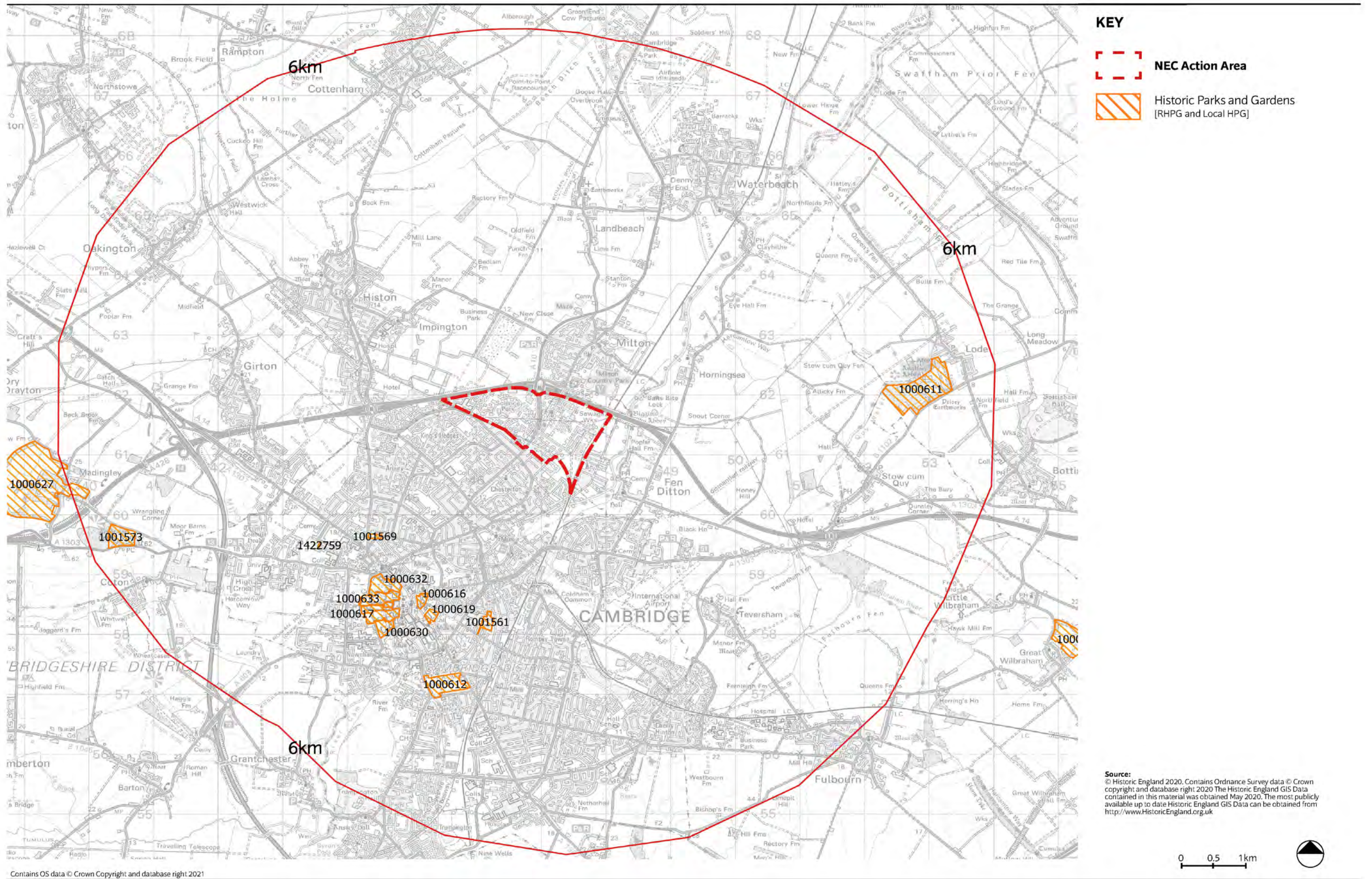


Figure 11: Scheduled Monuments within 3km of the site



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Figure 12: Line of site from Great St Mary's, Cambridge and Wandlebury towards Ely Cathedral

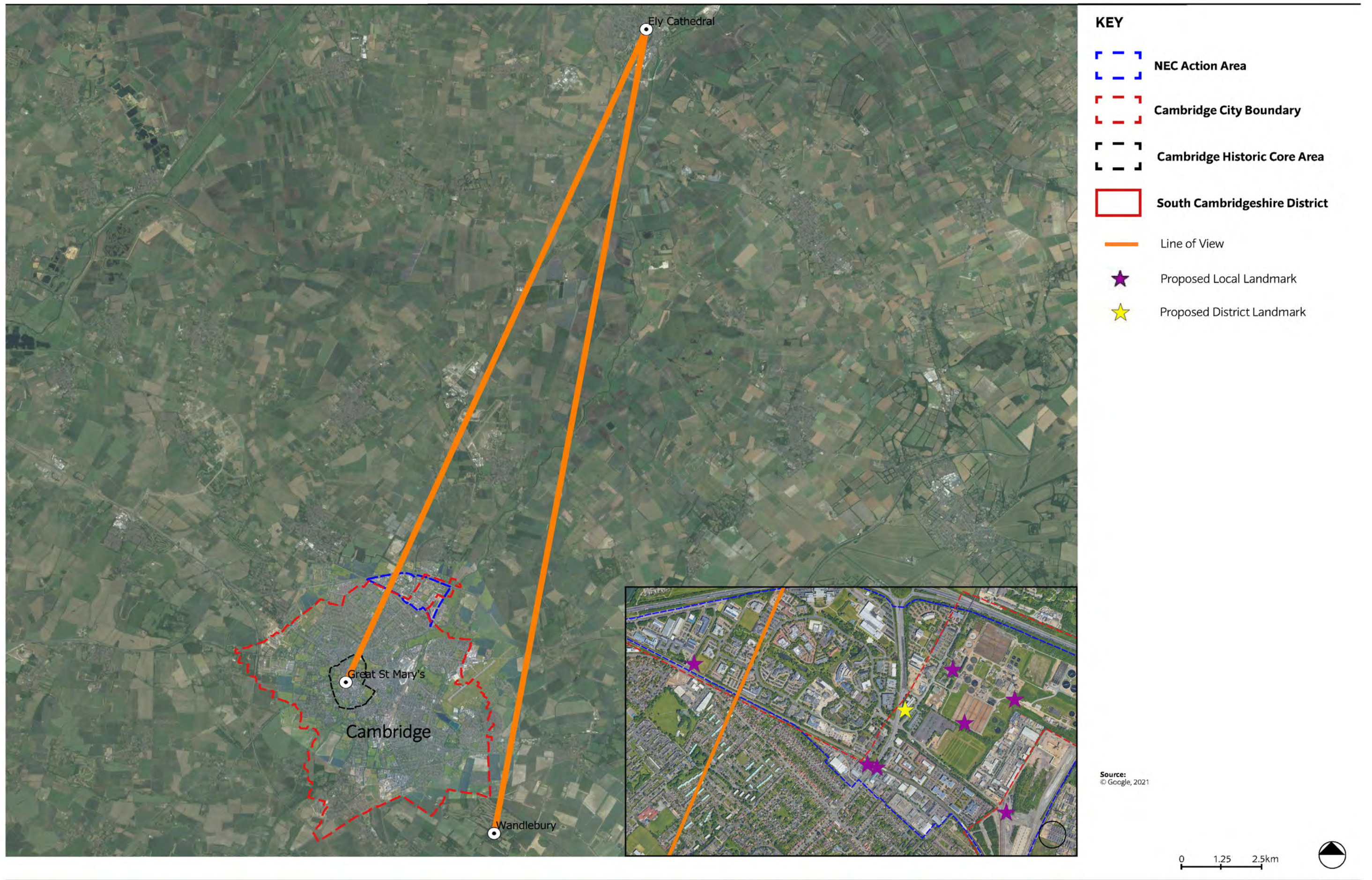


Figure 13: Views towards NEC from Madingley Hall and designed view north-east from the Cambridge American Cemetery



Figure 14: Views south west along Coronation Avenue from Anglesey Abbey



Figure 15: Vu City viewpoint locations



APPENDIX B – HISTORIC ENVIRONMENT RECORD SITES AND FINDS

APPENDIX B – CAMBRIDGESHIRE HISTORIC ENVIRONMENT RECORD SITES AND FINDS

HER ASSETS WITHIN THE NEC SITE

Name	Pref Ref	Monument ID	Date	Type
Dismantled Railway: Cambridge to St Ives Branch (forms a large part of the southern boundary of the site)	MCB19611	MCB19611	19th century to early 20th century	Railway
Great Eastern Railway (Cambridge Line) (forms the eastern boundary of the site)	MCB21582	MCB21582	19th century to early 20th century	Railway
Pillbox, Cambridge Science Park	MCB16399	MCB16399	World War II	Pillbox (Type FW3/24)
WWII Vehicle Depot, Trinity Farm, Milton	MCB17527	MCB17527	World War II	Vehicle Depot; Railway Siding
Roman cremation, Kings Hedges Farm, Impington	CB15697	MCB15697	1 st century AD to 2 nd century AD	Cremation
Former site of Farm Buildings, Cambridge Regional College Site	MCB20062	MCB20062	18th to 20th century	Farmhouse
Railway cutting and undated ditches, Milton	MCB11987	MCB11987	Post medieval	Railway; Ditch
Roman ring find, Milton Road	05217	MCB6342	Roman	Findspot
Undated ditch and possible ridge and furrow, Cambridge Science Park	MCB20484	MCB20484	Medieval to modern	Ridge and furrow
Cropmarks before Cambridge Science Park, Milton	MCB20318	MCB20318	Unknown	Ditch; Enclosure
Ridge and furrow, Cambridge Science Park	MCB17526	MCB17526	Post Medieval	Ridge and furrow

APPENDIX B – CAMBRIDGESHIRE HISTORIC ENVIRONMENT RECORD SITES AND FINDS

Name	Pref Ref	Monument ID	Date	Type
Prehistoric and Roman features, Cambridge Science Park	MCB17525	MCB17525	Late Bronze Age to Early Iron Age	Pit; Ditch; Pit
Prehistoric stone objects, 377 Milton Road	05219	MCB6344	Prehistoric	Findspot
Rectory Farm, Milton		MCB22615	19th century	Farm
Bronze Age beaker fragments, Milton	05532	MCB6748	Bronze Age	Findspot
Ring ditch cropmark, Milton	08326	MCB9985	Unknown	Ring Ditch
Undated ditch, St John's Innovation Park, Cambridge	MCB24204	MCB24204	Unknown	Ditch
Furrows and Undated Ditch at St John's Innovation Park, Cowley Road, Cambridge	MCB20105	MCB20105	Unknown	Ridge and furrow; Ditch
Site of cross, Cambridge	05229	MCB6354	Medieval to 19th century	Cross
Searchlight battery, Cowley Road, Cambridge	MCB27494	MCB27494	World War II	Searchlight Battery
Ridge and furrow and post-medieval features, Cowley Park	MCB15918	MCB15918	Medieval to 19th century	Ridge and furrow; Ditch; Field Drain
Post-medieval and undated features, St John's Innovation Park, Cowley	08330	MCB9989	Post Medieval	Feature; Post Hole
Post-medieval boundary ditch, St John's Innovation Park, Cambridge	MCB15916	MCB15916	Post Medieval	Boundary Ditch; Post Hole?
Chesterton Sidings, Chesterton Station Interchange, Cambridge	MCB19625	MCB19625	19th century	Railway Siding

APPENDIX B – CAMBRIDGESHIRE HISTORIC ENVIRONMENT RECORD SITES AND FINDS

HER ASSETS OUTSIDE OF THE NEC SITE, BUT WITHIN 250M OF THE SITE:

Name	Pref Ref	Monument ID	Date	Type
Former tramway, Milton Parish	MCB21583	MCB21583	19th Century	Tramway
Former ridge and furrow, Milton	MCB20022	MCB20022	Medieval	Ridge and furrow
Former ridge and furrow, Impington	MCB22591	MCB22591	Medieval	Ridge and furrow
Post medieval post holes and ditches, Kings Hedges Road	MCB19373	MCB19373	Post Medieval	Post Hole; Ditch
Pillbox, Cambridge	MCB16397	MCB16397	World War II	Pillbox
Chesterton Railway Bridge	MCB16375	MCB16375	20th Century	Railway Bridge
Stourbridge Common, Cambridge	10176	MCB12061	Medieval to modern	Fair; Common Land
Roman remains, Arbury 'In-Track' Guided Busway site	MCB19359	MCB19359	Roman	Ditch; Pit
Residual Roman remains, Guided busway route, Balancing Pond 6, Impington	CB15764	MCB15764	Roman	Findspot; Watercourse; Linear Feature
Possible earthwork, Milton	05608	MCB6840	Medieval	Earthwork
Roman settlement, Milton	05281	MCB6439	Roman	Inhumation; Settlement; Pit

APPENDIX B – CAMBRIDGESHIRE HISTORIC ENVIRONMENT RECORD SITES AND FINDS

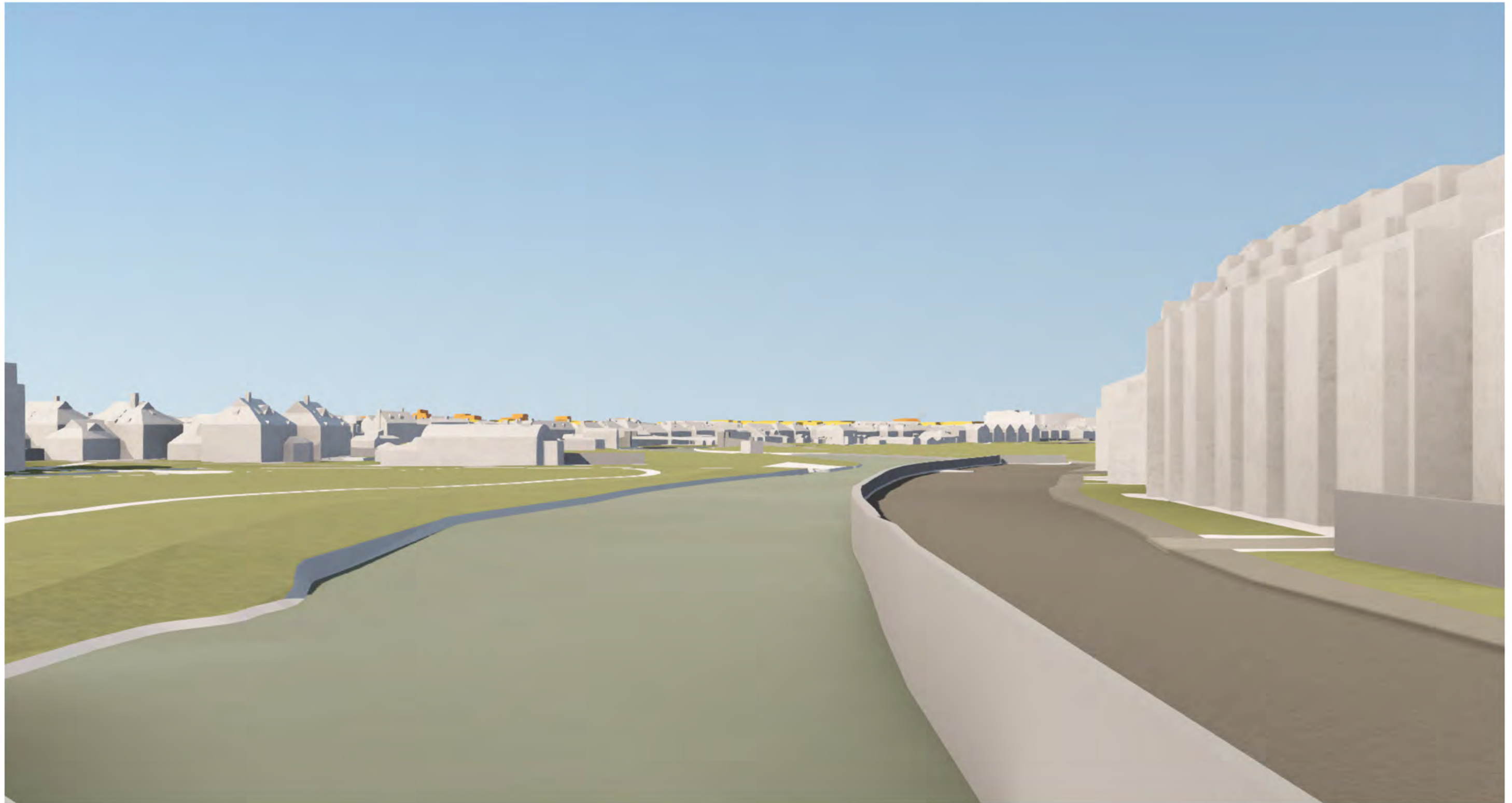
Name	Pref Ref	Monument ID	Date	Type
Roman pottery and ditches, Milton	05536	MCB6752	Roman	Site
Site of Former Gravel Pit, Sandy Park Road, Milton	MCB20561	MCB20561	19th century to 20th century	Extractive Pit
M.F. transmitter mast, Milton	MCB16573	MCB16573	Cold War to 20th century	Broadcasting Transmitter
Saxon inhumations, Milton	05540	MCB6758	Saxon	Inhumation
Extractive Pit, Fen Road, Milton	MCB20563	MCB20563	19th century to 20th century	Extractive Pit
Iron Age cremation, Chesterton	05539	MCB6756	Iron Age	Cremation
Former site of Junction Farm, Fen Road, Cambridge	MCB20579	MCB20579	19th century to 20th century	Farm
Chesterton Junction, Milton parish	MCB21584	MCB21584	19th century	Railway Junction
Bronze spearhead, Cambridge	05228	MCB6353	Bronze Age	Findspot
Prehistoric to post medieval remains, Nuffield Road	MCB15907	MCB15907	Early Neolithic to 16th century	Pit; Ditch; Ditch
Unidentified remains, St Andrews School	MCB17828	MCB17828	Post Medieval	Extractive Pit; Palaeochannel? Pit; Feature
Roman coin, Green End Road, Cambridge	05541	MCB6759	Roman	Findspot
Post-Medieval ditch and finds at 418a Milton Road, Cambridge	MCB20137	MCB20137	Post Medieval	Ditch

APPENDIX B – CAMBRIDGESHIRE HISTORIC ENVIRONMENT RECORD SITES AND FINDS

Name	Pref Ref	Monument ID	Date	Type
Palaeolithic handaxes and flakes, Milton Road pits	05224	MCB6349	Palaeolithic	Findspot
ARP Wardens Siren, King's Hedges Road, Cambridge	MCB25208	MCB25208	World War II	Air Raid Warning Siren
Horningsea ware, Cambridge	10981	MCB12905	Roman	Findspot
Undated linear features, Guided busway route, Arbury Park	CB15765	MCB15765	Unknown	Linear Feature
Undated features, Allotment Gardens Triangle, King's Hedges Road, Arbury	CB15748	MCB15748	Modern	Drain; Ditch; Post Hole
Roman road and associated features, Gypsy Ditches, Arbury	10087	MCB11952	Roman	Road; Pit; Ditch
Roman remains, Arbury Park Guided Busway site	MCB19361	MCB19361	Roman	Ditch; Pit
Post-Medieval features, Unex Lands, Arbury	CB15603	MCB15603	18th century to 19th century	Ditch; Feature

APPENDIX C – VUCITY MODELLING SAMPLE VIEWS

Figure A1: Viewpoint A - Riverside Bridge, no vegetation



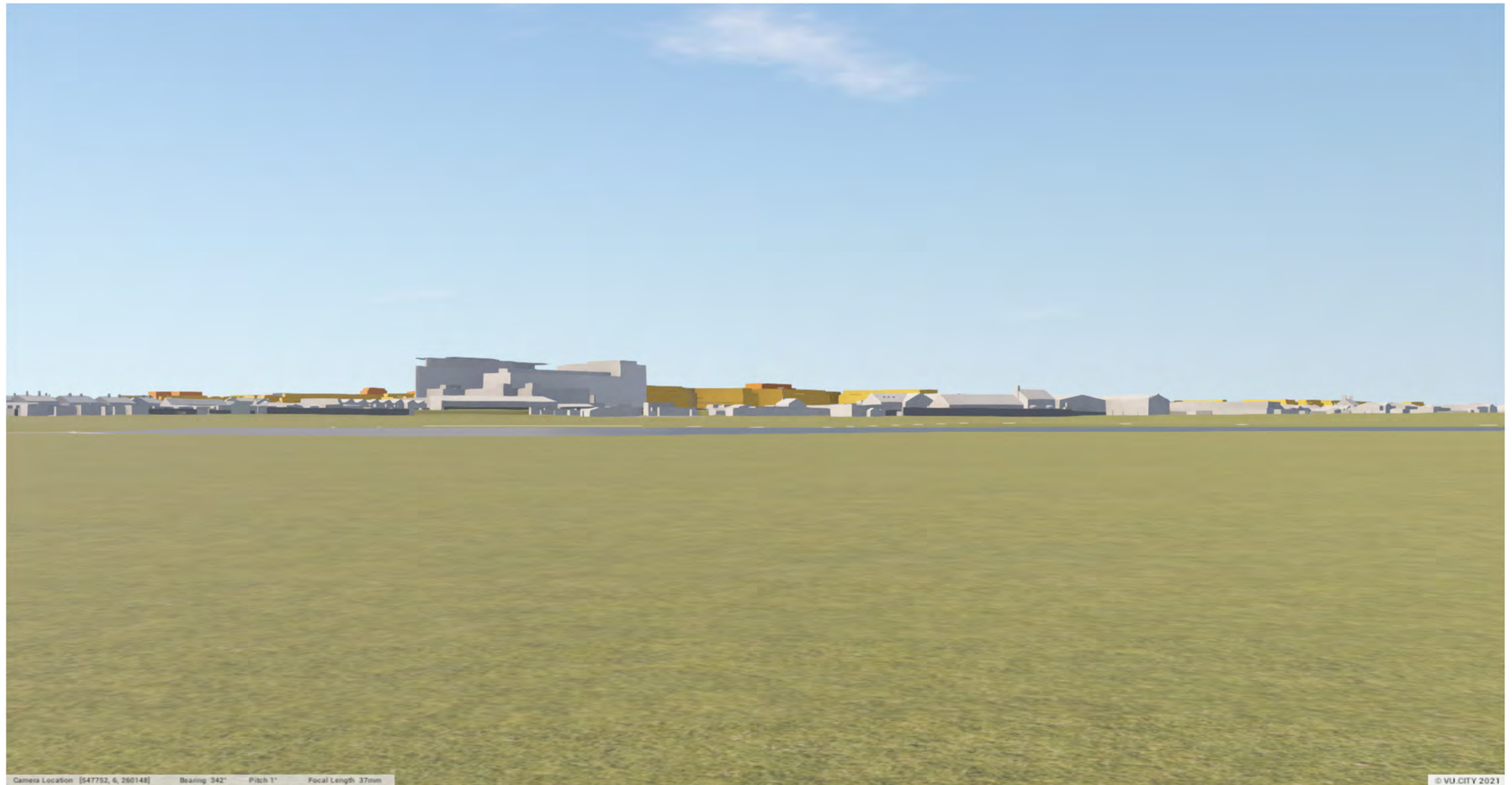
Source:
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Camera Location [546863, 6, 259724] Bearing 11° Pitch 1° Focal Length 37mm

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Camera Location [547752, 6, 260148] Bearing 342° Pitch 1° Focal Length 37mm

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Camera Location [546863, 6, 259724] Bearing 11° Pitch 1° Focal Length 37mm

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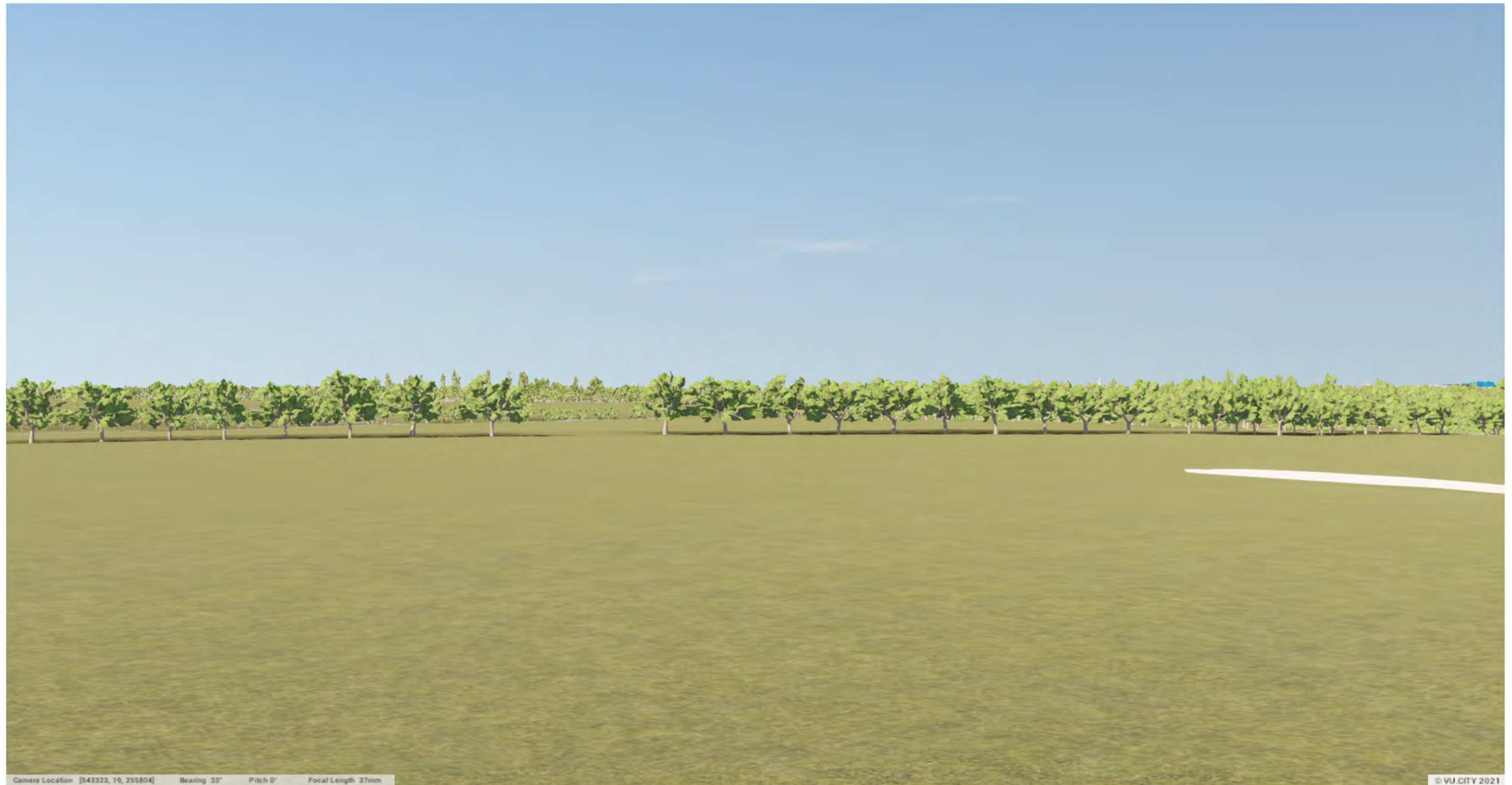
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Camera Location [543323, 19, 255804] Bearing 33° Pitch 0° Focal Length 37mm

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Camera Location [543323, 19, 255804] Bearing 33° Pitch 0° Focal Length 37mm

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Camera Location [541015, 46, 257312] Bearing 60° Pitch - 1° Focal Length 37mm

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Figure F1: Viewpoint F - Castle Mound, no vegetation

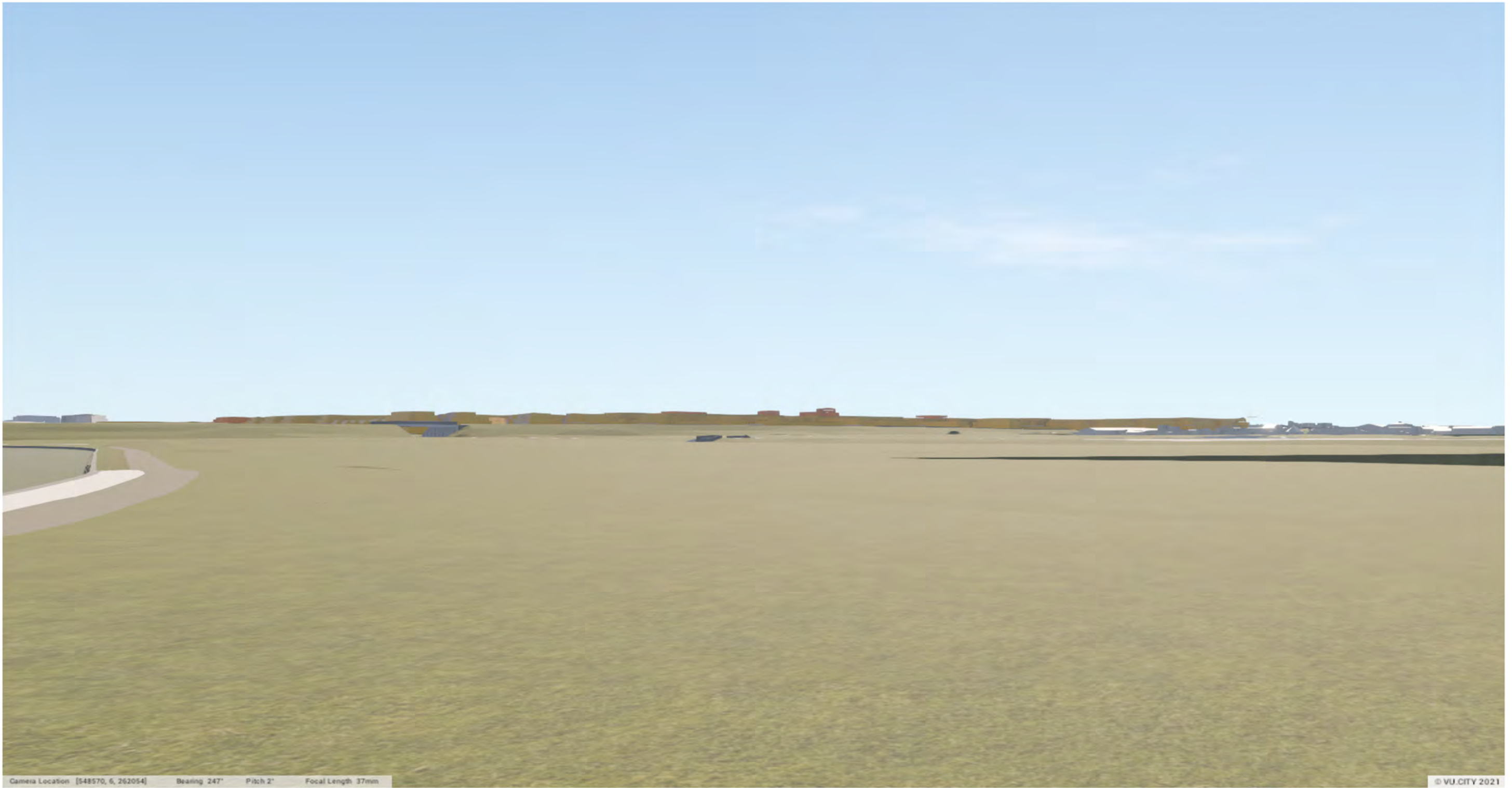


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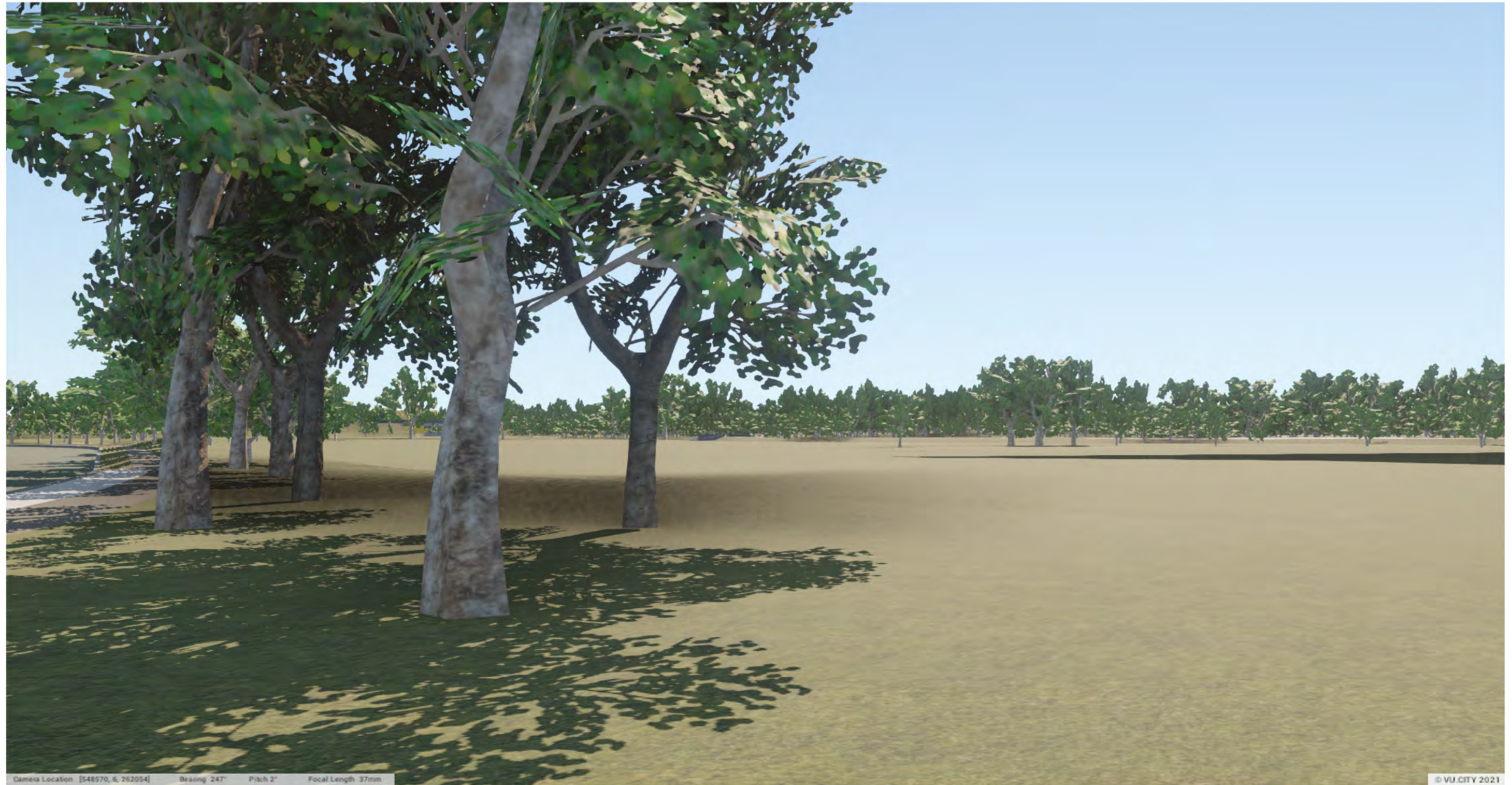
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Figure G1: Viewpoint G - Baits Lock, no vegetation

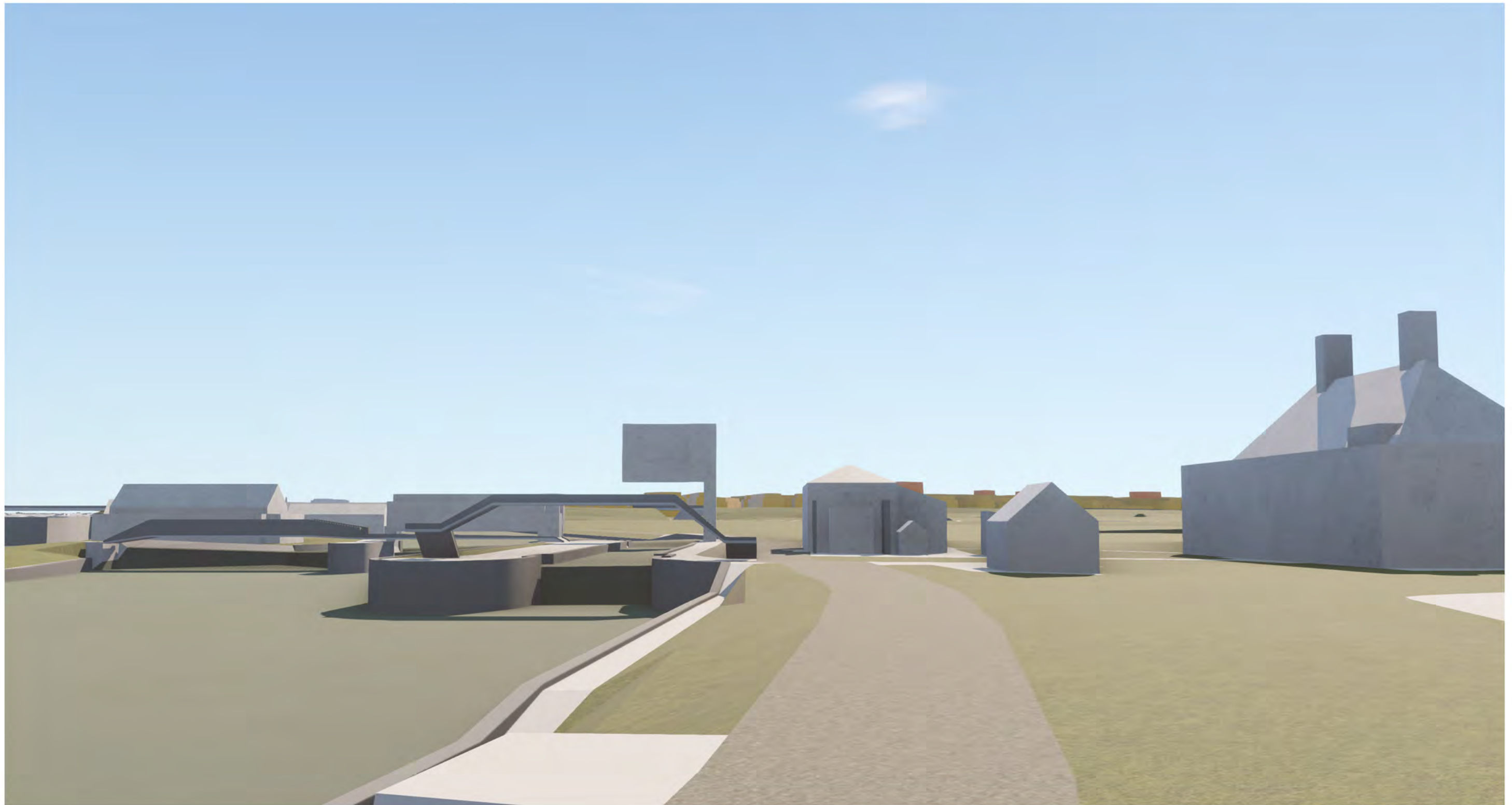


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Figure G2: Viewpoint G - Baits Lock with vegetation



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Figure G4: Viewpoint G - Baits Lock with vegetation



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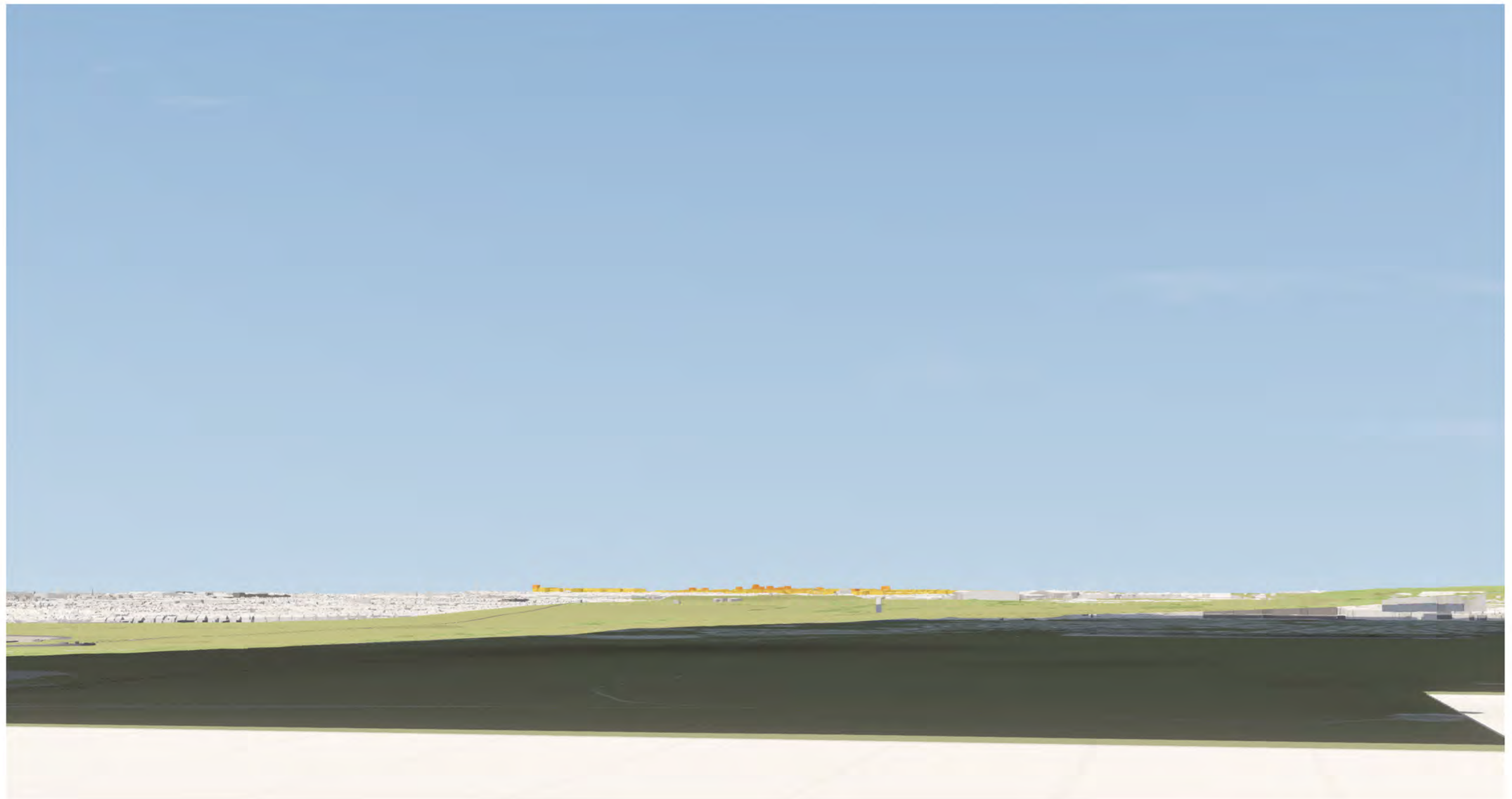
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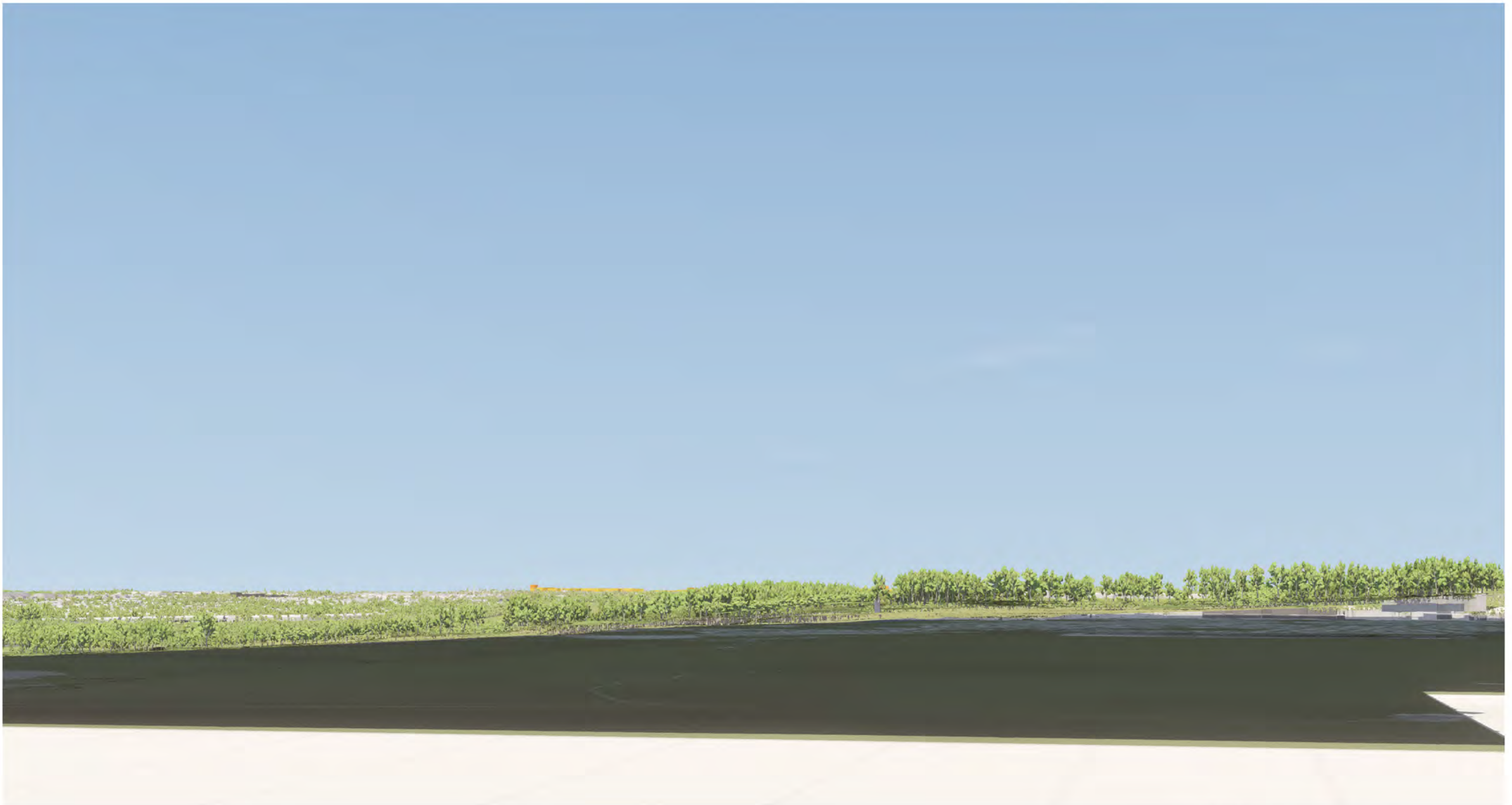
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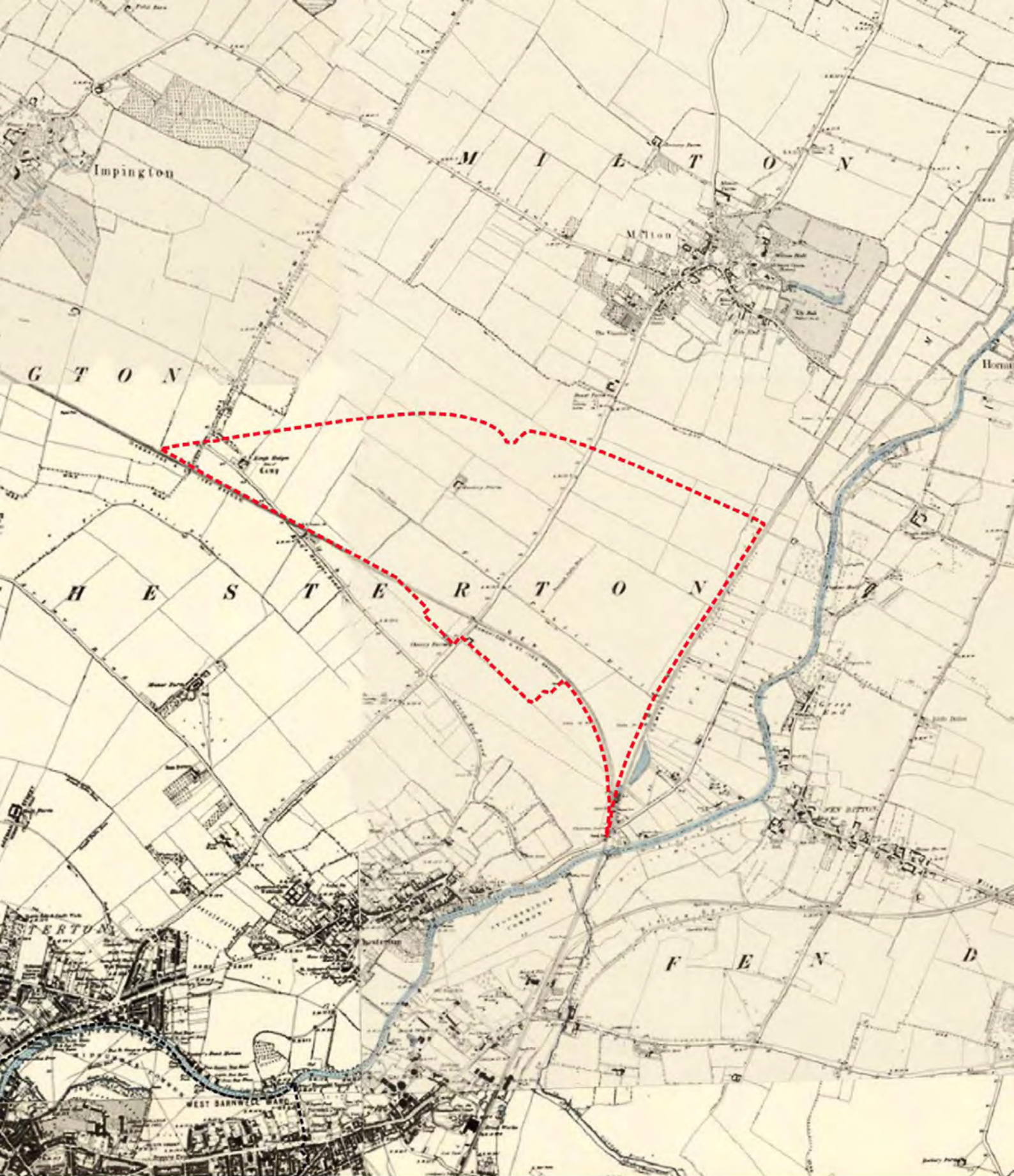
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